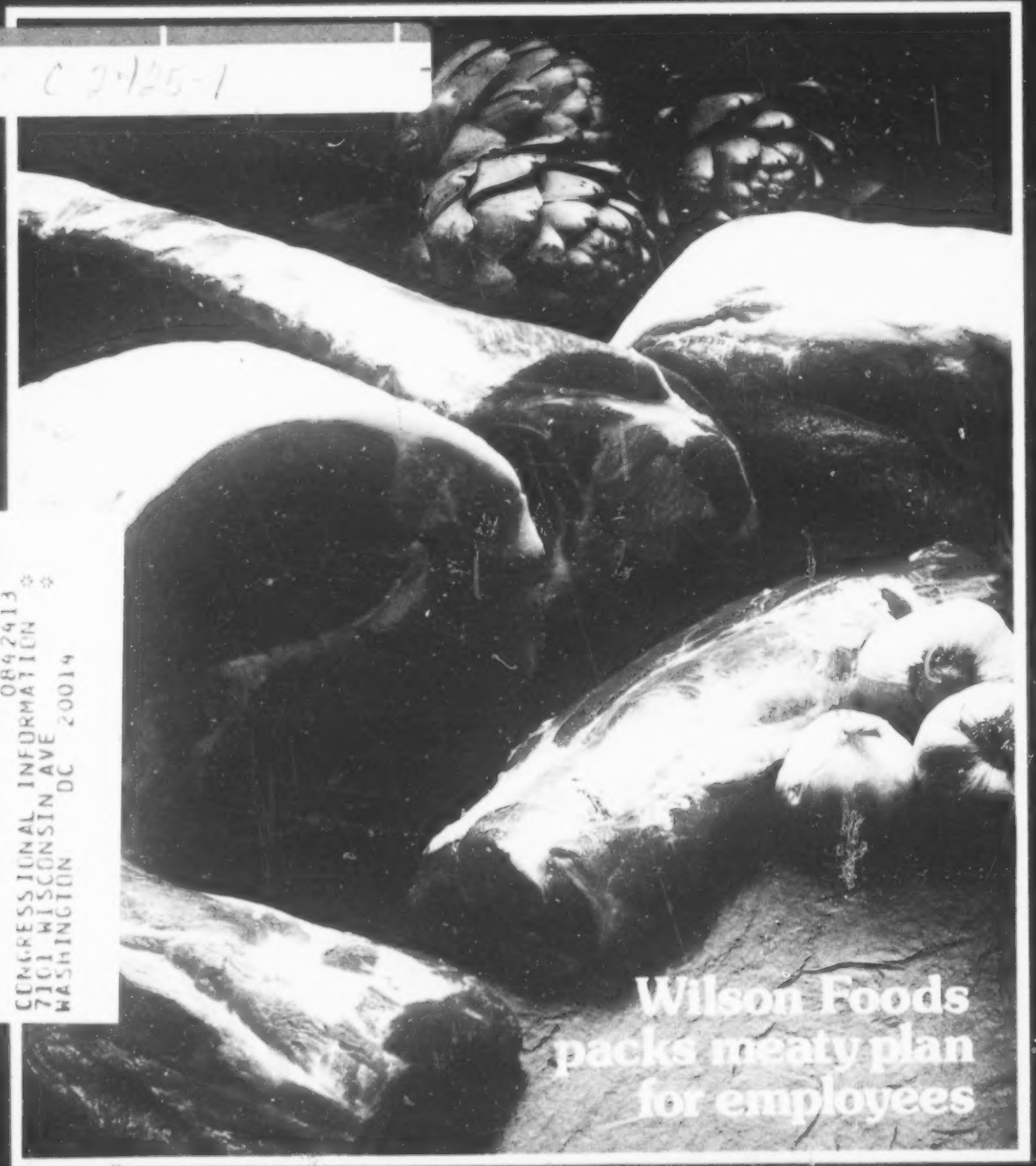
MAY 1980

Pension World

The Magazine for Plan Sponsors / A Publication of Communication Channels, Inc.

C 2425-1



C PN
0842413
CONGRESSIONAL INFORMATION
7101 WISCONSIN AVE
WASHINGTON DC 20014

Wilson Foods packs meaty plan for employees

Real estate: a comparative discussion

May 1980

Pension World

Volume 16, Number 5

The Magazine for Plan Sponsors / A Publication of Communication Channels, Inc.

Joseph Shore
President
Cyril Lee Ellison
Publisher
Harvey Bandremer
Associate Publisher
Diana H. P. Roberts
Editor
Marie Powers
Assistant Editor
Steven E. Schanes
Editorial Consultant
Charles E. Lloyd
Advertising Director
Martin Greene, Production Director
Fran Rappaport, Production Manager
Brian Buxton, Art Director
Elmer Dalton, Circulation Director

Contributing Editors

Ronald Derven
Morris Stone
Robert A. Levy
Noel Arnold Levin

Editorial Advisory Board

Clayton A. Boggan, Jr.
Wachovia Bank & Trust Company
Eugene B. Burroughs
International Brotherhood of Teamsters
Ernest J. E. Griffes
Levi Strauss
Michael F. Klein, Jr.
Price Waterhouse
Jack H. Leylegian II
Bank of America NT&SA
Ray L. Lillywhite
Alliance Capital Management
Matthew M. Lind
Travelers Insurance Companies
Malcolm D. MacKinnon
Prudential Insurance Company
Jeffrey D. Mamorsky
Vedder, Price, Kaufman, Kammholz & Day
Judith F. Mazo
Burns Jackson Miller Summit & Jacoby
Paul T. Shultz
Towers, Perrin, Forster & Crosby
Michael N. Thome
California State Teachers' Retirement System
Kenneth W. Tolo
University of Texas

FEATURES

6 ***Pension World*'s 1980-81 Editorial Advisory Board**
An introduction to our new panel.

18 **Packed with protection** **by Diana H. P. Roberts**
How Wilson Foods redesigned its benefits plan.

23 **Bonds: time to nibble or to take a big bite?** **by Ronald Derven**
An expert's outlook on today's bond market.

26 **Forms of property investments: a comparative discussion** **by Henri Alster**
A look at the investment possibilities of available real estate.

30 **Getting the "Facts"** **by Diana H. P. Roberts**
A look at an educational facet of the New York Stock Exchange.

36 **When to index . . . and when not to index** **by John C. Bogle**
Part II on using market index funds.

49 **Equities in an unstable era** **by James W. Harpel**
In this economy, what should an equity investor do?

51 **The pension business: some disturbing second thoughts** **by A. Michael Frinquelli**
An assessment of the current dangers in pension investing.

53 **9th annual survey of bank pooled pension fund accounts**

DEPARTMENTS

5 Guest Editorial
10 International Pension World
14 Washington Newsletter
42 Pension News
45 Pension People
47 Meetings and Conventions
64 Cases & Rulings
66 Arbitration Awards

Cover: Wilson Foods assessed its employee benefits program and decided to redesign the whole plan. How they did it begins on page 18.

BPA

Pension World is published monthly by Communication Channels, Inc., Joseph Shore, President; B.J. Kotsher, Executive Vice President, Betty Dornbush, Treasurer. Editorial and advertising offices at 6285 Barfield Road, Atlanta, GA 30328. Telephone (404) 256-9800. Pension World is a registered trademark of Communication Channels, Inc. © 1980 by Communication Channels, Inc. Controlled circulation postage paid at Shepherdsville, KY (USPS 502-110) and Atlanta, GA (USPS 410-030). Subscription rates: U.S.A., 1 year, $34; 2 years, $59; Canada and Mexico, 1 year, $36; Foreign, 1 year, $42. Single copies, $3.00. The opinions expressed by authors and contributors to Pension World are not necessarily those of the editors or publisher. Articles appearing in Pension World may not be reproduced in whole or in part without the express permission of the publisher. Microfilm copies of Pension World are available from University Microfilms, 300 North Zeeb Road, Ann Arbor, MI 48106. Postmaster: Please send form 3579 to Circulation Department, Pension World, 6285 Barfield Road, Atlanta, GA 30328.

9th annual survey of bank pooled pension fund accounts

Looking at the 1980 bank pooled pension fund statistics, one continues to note the reduction in the percentage of the amount invested in common stock. In our sampling of 1978, 85 percent of the funds were in common stock; in 1979, the percentage dropped to 49 percent; this year, our answers show only 39.7 percent of the funds are in common stock.

However, an increase of stock holdings may be on the way. When asked, "Do you expect to increase or decrease stock holdings in 1980?" sixty-three percent of those replying said they intended to increase stockholdings this year.

The next largest asset listed for bank pooled pension funds is cash, and it trails stocks only slightly, with 31.5 percent. Corporate bonds hold 21.3 percent of the assets, while 1.6 percent of the assets are in municipal bonds.

In the surveys of the past two years, the drop-outs have outnumbered the drop-ins, three to one in 1978 and six to one in 1979. This year's survey shows a real switch: drop-ins outnumber the drop-outs, 182 to 107. This seems to reflect a wider range of diversity among the stock assets. This is verified, perhaps, by the fact that in 1978, 776 different stock issues were listed in the survey; in 1979, only 549 stocks were listed; in this year's survey, stock assets are spread among 883 companies.

In the favorite 50, IBM continues to be the "sweetheart," with 86.7 percent of the respondents listing it among their holdings. Except for this number one spot, there is considerable change in the favorites listing.

The most dramatic upward movement is shown by energy-related stocks. Atlantic Richfield, number nine in 1979's survey, claims the number two spot in 1980. Schlumberger, Ltd., jumped all the way from 19 to number five. Standard Oil of Indiana moved from number 21 in '79 to number eight this year, and Standard Oil of California advanced from number 33 to number 12.

Advancement of energy-related stocks will surprise no one.

Other changes in the favorite 50: twenty-one new favorites are shown this year, compared to 13 new ones in 1979 and only six in 1978. That means almost 50 percent of the favorites of 1980 were not in the top 50 in 1979 and, conversely, that almost 50 percent of last year's favorites have dropped off the favorite 50 listing.

Ninety-one percent of the respondents to the 1980 survey report that the total funds in pooled accounts are up from last year, with an average increase of 23 percent. This increase in funds may be due to the performance record of pooled funds.

According to statistics published by Computer Directions Advisors, Inc., bank pooled common stock funds outperformed the S&P 500 stock index for the years ending in December, 1977, and in December, 1978. The pooled accounts continued to perform well over the past year. According to the December, 1979, report on "Bank Pooled Funds," published by CDA, the S&P 500 was up 18.5 for the year ending December 31, 1979, while the bank pooled common stocks showed a gain of 20.3 for the same period.

What stocks they hold

Stock	% of Respondents Holding	Number of Shares Held
Abbott Labs	18.5	100,600
ACF Industries, Inc.	1.9	100
Acme Cleveland	1.9	22,300
ADAC Labs	1.9	39,500
Aetna Life & Insurance	16.7	186,700
Ahmanson (H. F.) & Co.	3.7	30,200
Airborne Freight Co.	1.9	13,700
Air Products & Chemicals	9.3	344,220
Alaska Interstate Co.	1.9	45,000
Albany Int'l. Corp.	1.9	56,400
Alberta Gas Trunkline Corp.	1.9	70,000
Alcan Aluminum	20.4	11,000
Alco Standard Co.	1.9	5,000
Alexander & Alexander Services	5.6	67,000
Alexander & Baldwin	1.9	66,500
Allegheny Ludlum Industries	1.9	15,800
Allegheny Power System, Inc.	1.9	29,000
Allied Chemical Corp.	7.4	34,000
Allied Stores Corp.	1.9	200
Allis-Chalmers Corp.	5.6	4,600
Aluminum Co. of America	9.3	18,200
Amax, Inc.	7.4	27,735
Amdahl Corp.	1.9	50,000
Amerada Hess Corp.	5.6	41,100
American Airlines	5.6	278,100
American Brands	5.6	2,300
American Broadcasting Co.	14.8	132,600
American Can	1.9	200
American Cyanamid Co.	3.7	179,761
American Electric Power Co.	1.9	1,200
American Express	14.8	313,718
American General Insurance	1.9	300
American Greetings Corp.	3.7	105,000
American Home Products	29.6	227,650
American Hospital Supply	7.4	70,400
American Int'l. Group, Inc.	5.6	54,000
American Medical Int'l. Inc.	7.4	49,625
American Motors Corp.	1.9	300
American National Financing Corp.	3.7	75,000
American National Resources Co.	9.3	51,700
American Quasar Pet. Co.	1.9	87,000
American Resources Man. Corp.	5.6	66,000
American Standard, Inc.	7.4	58,200
American Stores Co.	1.9	69
American Telephone & Telegraph	50.	468,105
Ametek, Inc.	1.9	27,600
AMF, Inc.	1.9	200
AM International, Inc.	3.7	45,000
AMP, Inc.	7.4	24,600
Ampex Corp.	1.9	14,400
Amstar Corp.	1.9	100
Amsted Industries	5.6	67,900
Anderson-Clayton & Co.	3.7	51,700
Anglo Co., Ltd.	3.7	190,000
Anheuser-Busch, Inc.	9.3	119,900
Apache Corp.	5.6	74,666
Aquitane Co. of Canada	5.6	87,000
ARA Services, Inc.	1.9	3,600
ARC	1.9	5,300
Archer-Daniels-Midland Co.	7.4	55,000
Arizona Public Service Co.	3.7	53,500
Arkansas Louisiana Gas Co.	3.7	26,000
Armco Steel	3.7	500
Armsted Industries, Inc.	1.9	3,000
Armstrong Cork Co.	7.4	177,970
Arts Way Mfg., Inc.	1.9	63,300
ASA, Ltd.	1.9	100
Asarco, Inc.	3.7	50,300
Ashland Oil, Inc.	1.9	4,000
Associated Dry Goods Corp.	3.7	97,050
Atlantic Richfield Co.	55.6	318,300
Augat, Inc.	3.7	172,000
Automatic Data Processing, Inc.	3.7	6,000
Automatic Switch Co.	1.9	20,500
Avantek, Inc.	1.9	2,000
Avery Int'l. Corp.	3.7	190,900
Avon Products, Inc.	9.3	18,710
Avnet, Inc.	7.4	58,500
Baker International Corp.	18.5	146,701
Baldor Electric Co.	1.9	47,300
Ball Corp.	1.9	31,900
Baltimore Gas & Electric Co.	3.7	10,300
Bandag, Inc.	3.7	151,000
Bank America Corp.	7.4	76,400
Banker's Trust Corp.	5.6	105,090
Bausch & Lomb, Inc.	1.9	3,100
Baxter-Travinol Labs, Inc.	13	47,700
BBDO International	1.9	13,000
Bearings, Inc.	1.9	21,900
Beatrice Foods Co.	20.4	690,475
Beckman Instruments	7.4	60,000
Becton Dickinson & Co.	7.4	133,900
Belco Petroleum Corp.	1.9	31,000
Bendix Corp.	1.9	200
Beneficial Corp.	3.7	6,100
Bergen Brunswig Corp.	1.9	16,400
Best Products, Inc.	11.1	113,600
Bethlehem Steel Corp.	5.6	12,400
Betz Labs, Inc.	5.6	87,100
Big Three Ind.	3.7	31,000
Biochem Int'l, Inc.	1.9	40,000
Bio Rad Labs, Inc.	1.9	6,300
Biomedical Reference Labs	1.9	17,500
Black & Decker Mfg. Co.	1.9	400
Bliss & Laughlin Industries	1.9	22,770
Blue Bell	11.1	80,500
Boeing Co.	18.5	221,900
Boise Cascade Corp.	5.6	13,400
Borden, Inc.	3.7	59,300
Borg-Warner Group	3.7	4,200
Bow Valley Industries, Ltd.	1.9	35,000
BP Canada, Inc.	1.9	25,000
Braniff Int'l., Corp.	1.9	170,000
Brenda Mines, Ltd.	1.9	54,400
Briggs & Stratton Corp.	1.9	100
Bristol-Myers Co.	13	89,058
British Petroleum	3.7	2,400
Brockway Glass Co.	1.9	6,000
Brooklyn Union Gas Co.	1.9	100
Brooks Fashion, Inc.	1.9	37,500
Brooks Harvey Realty Inv.	1.9	33,600
Brunswick Corp.	5.6	128,800
Bucyrus Erie Co.	9.3	170,100
Burlington Industries, Inc.	3.7	1,800
Burlington Northern, Inc.	5.6	591,000
Burndy Corp.	5.6	256,800
Burroughs Corp.	20.4	102,900
Caldor, Inc.	1.9	18,000
California Computer Prod.	1.9	38,652
Campbell Red Lake Mines	1.9	200
Campbell Soup Co.	3.7	43,000
Campbell Taggart, Inc.	1.9	2,500
Cameron Iron Works	1.9	51,600
Capital Cities Communication, Inc.	7.4	151,400
Capital Holding Corp.	7.4	64,800
Carnation Co.	11.1	67,700
Carolina Power & Light	1.9	4,000
Carpenter Techology	5.6	46,300
Carter Hawley Hale	7.4	91,900
Castle & Cooke, Inc.	1.9	82,950
Caterpillar Tractor Co.	31.5	316,487
CBI Industries	1.9	6,000
CBS, Inc.	13	85,400
Celanese Corp.	3.7	25,100
Centex Corp.	5.6	85,100
Central Louisiana Energy	1.9	40,000

What stocks they hold

Stock	% of Respondents Holding	Number of Shares Held
Central Pacific Minerals	3.7	6,050
Central & Southwest Corp.	9.3	159,414
Central Soya Co., Inc.	1.9	140,400
Central Tel. & Utilities	9.3	54,700
Centran Corp.	1.9	13,000
Cessna Aircraft Co.	1.9	15,700
CFS Continental, Inc.	3.7	98,000
Champion Spark Plug Co.	11.1	70,900
Charter NY Corp.	1.9	1,500
Chase Manhattan Bank	7.4	122,200
Chesebrough-Ponds, Inc.	14.8	218,000
Chessie System	3.7	4,200
Chicago Pneumatic Tool Co.	1.9	100
Chieftain Deve, Ltd.	1.9	90,000
Chrysler Corp.	1.9	800
Church's Fried Chicken, Inc.	1.9	9,500
Cincinnati Gas & Electric	1.9	3,000
Cincinnati Milacron	1.9	100
Circle K Corp.	1.9	26,000
Citicorp	22.2	172,500
Cities Service Co.	3.7	12,500
CIT Financial Corp.	3.7	50,200
City Investing Co.	5.6	30,500
Clark Equipment Co.	13	59,300
Clark Oil	3.7	25,000
Cleveland Cliffs Iron Co.	5.6	74,200
Cleveland Electric Illumination	1.9	10,450
Clorox Co.	1.9	200
Cluett, Peabody & Co.	1.9	100
CNA Finance Corp.	1.9	300
Coastal States Gas Corp.	1.9	38,000
Cobe Laboratories, Inc.	1.9	40,000
Coca-Cola Co.	22.2	92,150
Colgate-Palmolive Co.	14.8	446,870
Color Tile, Inc.	3.7	58,000
Colt Industries, Inc.	7.4	33,700
Columbia Gas System, Inc.	1.9	29,600
Commonwealth Edison Co.	7.4	72,400
Communications Industries	1.9	82,000
Community Psychiatric Centers	1.9	3,000
Computer Sciences	3.7	15,000
Comshare, Inc.	1.9	5,000
Cone Mills Corp.	1.9	100
Congoleum Corp.	1.9	78,200
Conn. General Insurance	13.0	101,695
Conoco, Inc.	18.5	148,400
Consolidated Edison (NY)	11.1	59,000
Consolidated Foods Corp.	1.9	41,400
Consolidated Freightways	9.3	83,700
Consolidated Natural Gas	3.7	200
Consolidated Oil & Gas, Inc.	1.9	85,500
Consolidated Papers, Inc.	3.7	7,000
Continental Airlines	1.9	185,500
Continental Group, Inc.	7.4	150,870
Continental Illinois Corp.	11.1	31,060
Continental Telephone Corp.	9.3	75,800
Continuous Curve Contact Lenses	1.9	10,000
Control Data Corp.	5.6	21,200
Cooper Industries, Inc.	7.4	20,166
Cooper Labs	3.7	62,500
Coors (Adolph) Co.	1.9	300
Copeland Corp.	1.9	100
Core Industries	1.9	21,000
Corning Glass Works	5.6	30,300
Cox Broadcasting Corp.	1.9	100
CPC Int'l, Inc.	5.6	900
CPT Corp.	1.9	2,500
Crane Co.	1.9	104
Cray Research, Inc.	1.9	2,094
Cross (AT)	1.9	3,000
Cross & Trucker Co.	1.9	25,000
Crouse-Hinds Co.	3.7	155,950
Crown Cork & Seal Co., Inc.	1.9	100
Crown Zellerbach	5.6	36,300
Crum & Forster, Inc.	3.7	31,700
Crutcher Resources	3.7	230,800
Cummins Engine Co. Inc.	1.9	100
Dana Corp.	7.4	18,200
Dart Industries, Inc.	7.4	154,034
Data General Corp.	5.6	22,600
Datapoint	9.3	10,900
Dataproducts	3.7	65,900
Data Terminal Systems	1.9	10,000
Dayton-Hudson Corp.	9.3	51,400
Dean Foods Co.	1.9	20,000
Deere & Co.	9.3	56,300
DeKalb Ag. Research	3.7	101,000
Delta Airlines, Inc.	11.1	32,200
Deluxe Check Printers	3.7	10,000
Denny's, Inc.	5.6	79,500
Dentsplay Int'l	1.9	95,700
Detroit Edison	3.7	700
Diamond Int'l Co.	3.7	4,510
Diamond Shamrock Corp.	5.6	47,000
Diebold	1.9	34,000
Digital Equipment	22.2	141,400
Digital Scientific	1.9	62,000
Dillingham Corp.	1.9	179,600
Disney (Walt) Productions	7.4	44,777
Dome Mines, Ltd.	1.9	200
Dome Petroleum	7.4	109,000
Dorchester Gas Corp.	1.9	3,000
Dover Corp.	5.6	73,200
Dow Chemical	27.8	585,516
Dravo	3.7	83,000
Dressler Industries	20.4	120,500
Dr. Pepper Co.	5.6	22,200
Duke Power Co.	9.3	156,300
Dun & Bradstreet Co.	5.6	40,800
DuPont, El de Nemours & Co.	7.4	39,800
Eastern Airlines, Inc.	1.9	197,300
Eastern Gas Fuel Associates	3.7	67,200
Eastman Kodak Co.	27.8	297,908
Eaton Corp.	9.3	74,185
Echlin Manufacturing Co.	1.9	200
Economics Laboratory	1.9	148,000
Eckerd (Jack) Corp.	7.4	87,620
Edison Brothers Stores, Inc.	1.9	24,500
El Paso Co.	5.6	67,500
Emerson Electric Co.	20.4	244,400
Emery Air Freight	3.7	16,200
Employers Casualty Co.	1.9	9,000
Energy Reserves Group	3.7	75,000
Englehard Minerals & Chemicals	9.3	26,620
Enserch Corp.	7.4	83,100
Equifax, Inc.	1.9	3,000
Equitable Gas Co.	1.9	9,300
ERC	1.9	43,000
Esmark, Inc.	1.9	200
Ethyl Corp.	1.9	9,500
Evans Products	5.6	54,100
Ex-Cell-O	1.9	100
Exxon Corp.	46.3	482,989
Fabergé	1.9	100
Farinon Corp.	1.9	30,000
Farmer's Group, Inc.	1.9	3,500
Fedders	1.9	100
Federal Express	1.9	37,000
Federal Farm Cr.	1.9	250,000
Federal National Mortgage Associates	7.4	114,100
Federal Paper Board Co.	1.9	100
Federated Department Stores	7.4	89,400
Fidelity Daily Income Trust	1.9	85,208
Fidelity Financial Corp.	1.9	30,000
Financial Federation	1.9	25,000
Firestone Tire & Rubber Co.	3.7	39,000
First Bank Systems, Inc.	3.7	91,730
First Charter Financial Corp.	7.4	187,400

What stocks they hold

Stock	% of Respondents Holding	Number of Shares Held
First Chicago Corp.	1.9	400
First City Bancorporation, Texas	5.6	74,000
First International Bancshares	5.6	14,525
First Mississippi Corp.	3.7	44,600
First National Boston	1.9	100
Fleetwood Enterprises, Inc.	1.9	100
Flightsafety International	3.7	31,000
Flintkote Co.	1.9	105
Florida Commercial Banks	1.9	6,900
Florida Power Co.	7.4	66,818
Florida Power & Light Co.	5.6	93,100
Fluor Corp.	5.6	16,000
FMC Corp.	3.7	4,300
Ford Motor Co.	14.8	63,465
Forest Oil Co.	1.9	50,000
Foster Wheeler Corp.	1.9	200
Fourphase Common Corp.	1.9	10,000
Fox-Stanley Photo Products, Inc.	1.9	100,000
Franklin Electric Co.	1.9	40,000
Freeport Minerals Co.	1.9	110,000
Frontier Airlines, Inc.	1.9	81,000
Fruehauf Corp.	1.9	100
Gannett Co.	3.7	800
Gates Learjet	3.7	6,750
Gatx Corp.	5.6	22,500
Geico Corp.	1.9	13,700
General American Oil Co., Texas	3.7	36,166
General Automation, California	1.9	138,400
General Automotive Parts	1.9	20,000
General Dynamics Corp.	3.7	26,250
General Electric Co.	35.2	350,562
General Foods Corp.	7.4	207,415
General Instrument Corp.	3.7	5,000
General Mills Corp.	7.4	86,900
General Motors Corp.	22.2	211,209
General Portland Corp.	1.9	100
General Reinsurance Corp.	1.9	8,600
General Signal Corp.	3.7	3,200
General Telephone & Electronics	11.1	235,780
Genesco Corp.	1.9	100
Genuine Parts Co.	3.7	3,300
Georgia Pacific Corp.	18.5	360,808
Geosource	1.9	8,200
Gerber Products Co.	3.7	100
Getty Oil Co.	16.7	94,500
Giddings & Lewis	1.9	100
Gilbraltar Financial Corp.	1.9	110,000
Gillette Co.	7.4	50,300
GK Technologies	1.9	3,300
Gleason Works	1.9	175,000
Global Marine	3.7	50,100
Golden West Financial	5.6	156,000
Goodrich (BF) Co.	1.9	200
Goodyear Tire & Rubber Co.	7.4	231,594
Gould, Inc.	3.7	18,300
Grainger (W.W.), Inc.	1.9	10,800
Great Atlantic & Pacific Tea Co.	1.9	200
Great Lakes Chemical	3.7	25,000
Great Northern Nekoosa Corp.	5.6	15,700
Great Western Financial Corp.	11.1	246,700
Grumman Co.	1.9	100
Gulf Canada, Ltd.	3.7	3,000
Gulf Oil Corp.	14.8	155,288
Gulf United Corp.	7.4	161,900
Gulf & Western Industries	3.7	62,100
Haemonetics	1.9	91,200
Hall (Frank B.) & Co.	1.9	30,000
Halliburton Co.	24.1	104,600
Harcourt, Brace, Jovanovich, Inc.	3.7	124,500
Harland (John) Co.	3.7	43,900
Harris Corp.	3.7	53,700
Harris Bankcorp, Inc.	1.9	109,500
Harsco Corp.	1.9	3,000
Hart, Schaffer & Marx, Inc.	1.9	100
Harte Hanks	1.9	12,500
Hawaii Bancorporation	1.9	60,000
Hayes-Albion	1.9	75,000
Hazelton Laboratories	3.7	18,000
Health-Tex, Inc.	1.9	24,950
Heck's, Inc.	1.9	99,000
Heinz (HJ) Co.	1.9	118,975
Heizer Corp.	1.9	455,000
Heller (Walter E.) Int'l	3.7	156,200
Hercules, Inc.	11.1	156,600
Hershey Foods Corp.	3.7	7,100
Heublein, Inc.	9.3	51,900
Hewlett Packard Co.	7.4	21,100
Hilton Hotels Corp.	13.	43,900
Hiram Walker	1.9	200
Honeywell, Inc.	11.1	49,500
Hospital Corp. of America	11.1	53,300
Household Finance Corp.	5.6	67,500
Houston Industries, Inc.	13.	66,100
Houston Natural Gas Corp.	3.7	8,500
Howard Johnson Co.	1.9	200
H & R Block, Inc.	1.9	1,500
Hubbell (Harvey), Inc.	1.9	46,200
Hudson Bay Oil & Gas Co., Ltd.	1.9	56,500
Hughes Tool Co.	16.7	252,650
Humana	5.6	38,100
Husky Oil, Ltd.	1.9	49,100
Huyck, Inc.	1.9	200,400
Hyster Co.	3.7	17,000
IBM	86.7	596,072
IC Industries	1.9	200
Ideal Basic Industries, Inc.	1.9	5,600
Illinois Tool Works	1.9	12,000
Imperial Oil, Ltd.	11.1	162,200
IMS International	1.9	45,500
INA Corp.	1.9	300
Inco, Ltd.	1.9	9,800
Inexco Oil Co.	1.9	62,500
Ingersoll-Rand Co.	5.6	26,700
Inland Steel Co.	5.6	60,900
Instrumentation Laboratory	1.9	45,000
Intel Corp	11.1	46,387
Interco, Inc.	9.3	53,800
Interlake, Inc.	1.9	100
Int'l Flavors & Fragrances	5.6	17,900
International Harverster Co.	5.6	7,100
Int'l Paper Co.	13.	221,040
International Telephone & Telegraph	12.9	152,945
Int'l Mineral & Chemical	3.7	4,800
Interpublic Group of Cos., Inc.	1.9	57,000
Interstil Common	1.9	10,200
James River Corp.	1.9	8,088
Jefferson Pilot	5.6	19,000
Jewel Cos., Inc.	7.4	66,700
Jim Walter Corp.	3.7	10,200
Johns Manville	3.7	700
Johnson & Johnson	20.4	205,529
Jonathan Logan, Inc.	1.9	100
Joseph Schlitz Brewing Co.	1.9	300
Joy Manufacturing	9.3	88,100
K-Mart Corp.	31.5	593,196
Kaiser Aluminum & Chemical Corp.	7.4	90,300
Kaufman Aluminum & Chemical Corp.	1.9	400
Kellogg Co.	1.9	800
Kennameial, Inc.	1.9	48,800
Kennecott Copper Corp.	3.7	105,000
Kerr McGee Corp.	9.3	14,600
Kevex Corp.	3.7	59,195
Keystone International, Inc.	3.7	75,525
Kimberly-Clark Corp.	11.1	169,100
Knight-Ridder Newspapers, Inc.	3.7	180,300
Koger Properties	1.9	66,000

What stocks they hold

Stock	% of Respondents Holding	Number of Shares Held
Koppers, Inc.	1.9	15,000
Kraft, Inc.	7.4	46,300
Kroger Co.	3.7	18,900
Kroy Industries, Inc.	1.9	10,600
Lance, Inc.	1.9	1,000
Lancana Mining Corp.	1.9	87,000
La Quinta Motor Inns, Inc.	1.9	2,500
Lanier Business Products	3.7	1,500
Lawson Products, Inc.	1.9	90,000
Lear-Siegler Corp.	3.7	65,000
Leaseway Transportation Corp.	1.9	3,700
Leggett Platt, Inc.	1.9	50,000
Lenox, Inc.	1.9	79,900
Levi Strauss & Co.	14.8	33,485
Libbey-Owens Ford Co.	1.9	100
Liberty National Life Insurance Co.	3.7	39,833
Liberty Corp.	1.9	9,700
Liggett Group, Inc.	1.9	100
Lilly, Eli & Co.	1.9	59,600
Lin Broadcasting Corp.	1.9	20,000
Lincoln National Corp. Industries	3.7	9,200
Lindberg Corp.	1.9	5,000
Litton Industries, Inc.	5.6	50,515
Lockheed Corp.	1.9	136,800
Loctite Corp.	1.9	125,000
Loews Cos.	1.9	193,600
Lomas & Nettleton	1.9	7,300
Lone Star Industries, Inc.	1.9	100
Longview Fibre Co.	1.9	4,000
Louisiana Land & Exploration	5.6	7,700
Louisiana-Pacific Corp.	3.7	8,506
Louisville Gas & Electric Co.	1.9	21,300
Lubrizol Corp.	7.4	10,000
Lucky Stores, Inc.	1.9	433
MacMillan Bloedel, Ltd.	1.9	10,000
MacMillan, Inc.	1.9	100
Macy (R. H.) & Co.	1.9	4,900
Mapco, Inc.	7.4	37,500
Management Assistance, Inc.	5.6	192,500
Manufacturers Hanover Corp.	5.6	25,600
Marathon Oil	13.0	57,900
Marion Laboratories, Inc.	1.9	40,000
Mark Controls	1.9	3,714
Marriott Corp.	3.7	338,235
Marshall Field & Co.	1.9	100
Marsh & McLennan Cosmetics	11.1	34,900
Martin Marietta Corp.	9.3	52,300
Maryland Cup Corp.	1.9	100
Maryland National Bank	1.9	168,600
Masco Corp.	13.0	401,300
Masonite Corp.	1.9	100
Massey Ferguson, Ltd.	1.9	200
Materials Research Corp.	1.9	6,573
May Department Stores Co.	3.7	18,700
May Petroleum, Inc.	1.9	65,000
Maytag Co.	3.7	49,300
MCA, Inc.	3.7	30,261
McDermott (J. Ray) Co.	7.4	319,000
McDonald's Corp.	14.8	66,700
McDonnell Douglas Corp.	7.4	45,000
McFarland Energy	1.9	16,000
McGraw-Edison Co.	3.7	6,200
McGraw Hill, Inc.	5.6	62,800
MCI Communications Corp.	1.9	50,000
McLean Trucking Co.	1.9	100
McMoran Oil & Gas Co.	3.7	64,100
Mead Corp.	3.7	700
Measurex Corp.	5.6	107,000
Medtronic, Inc.	5.6	71,000
MEI Corp.	1.9	100,000
Mellon National Corp.	3.7	40,200
Melville Corp.	1.9	200
Memorex Corp.	1.9	162,400
Merck & Co.	22.2	91,410
Mercantile Texas Corp.	1.9	66,660
Merland Exploration, Ltd.	1.9	80,000
Merrill Lynch & Co.	3.7	59,000
Mesa Petroleum Co.	11.1	98,700
Mesa Royalty Trust	7.4	94,700
Metpath, Inc.	3.7	104,750
Metro Goldwyn Mayer, Inc.	1.9	349
Meyers Parking System, Inc.	1.9	32,845
MGIC Investment Corp.	1.9	100,000
Microdyne Corp.	1.9	3,000
Middle South Utilities, Inc.	3.7	18,800
Midland Ross Corp.	1.9	7,000
The Miller-Wohl Co., Inc.	1.9	2,800
Millipore Corp.	3.7	85,000
Milton Bradley Co.	5.6	45,100
Minnesota Mining & Manufacturing	22.2	256,031
Missouri Pacific	9.3	18,200
Mitchell Energy & Development	3.7	3,600
Missouri Pacific Corp.	1.9	200
Mobil Corp	13	339,750
Mohasco Corp.	1.9	100
Molex, Inc.	1.9	90,100
Monarch Capital Corp.	1.9	100,000
Monsanto Co.	14.8	202,427
Moran Brothers	3.7	139,900
Morgan (J. P.) & Co.	18.5	174,100
Morrison-Knudsen	1.9	3,000
Morton-Norwich	3.7	61,500
Motorola, Inc.	22.2	199,462
Mountain Fuel Supply	1.9	18,000
MTS System Corp.	1.9	25,500
Multimedia, Inc.	1.9	67,500
Murphy Oil Corp.	1.9	31,900
Nabisco, Inc.	5.6	66,660
Nalco Chemical	5.6	36,400
Nashua Corp.	1.9	1,000
National Computers System, Inc.	3.7	44,100
National Data Corp.	1.9	55,900
National Distillers & Chemical Corp.	3.7	300
National Gypsum Co.	1.9	200
National Medical Care, Inc.	3.7	24,400
National Medical Enterprises	3.7	11,798
National Semi-Conductor	5.6	4,100
National Service Industries	1.9	20,000
NCH Corp.	1.9	70,000
NCNB Corp.	3.7	200,200
NCR	11.1	88,900
New Court Partners	1.9	1
New England Electric System	1.9	200
New England Nuclear Corp.	1.9	55,000
New York Times Co.	1.9	53,000
Niagara Mohawk Power Corp.	1.9	700
Nickolos Oil & Gas Co.	5.6	158,200
NL Industries	9.3	83,300
NLT Corp.	5.6	47,000
Noble Affiliates	9.3	75,400
Norcen Energy Resources, Ltd.	1.9	60,000
Nordstrom, Inc.	1.9	40,500
Norfolk & Western Railway Co.	5.6	60,000
Norris Industries	3.7	88,000
Northeast Utilities	1.9	22,000
Northern Nat. Gas Co.	5.6	13,200
Northern States Power Co.	7.4	86,800
Northern Telecom, Ltd.	9.3	80,200
Northrop Corp.	5.6	45,700
Northwest Airlines	11.1	106,700
Northwest Bancorporation	7.4	25,160
Northwest Industries	5.6	16,300
Northwestern Nat. Life Ins. Co.	1.9	27,300
Norton Simon, Inc.	1.9	34,127
Nowsco Well, Ltd.	1.9	57,000

What stocks they hold

Stock	% of Respondents Holding	Number of Shares Held
Noxell Corp.	3.7	52,100
Nucor Corp.	3.7	13,500
Oak Industries, Inc.	1.9	16,000
Occidental Petroleum	13	105,900
Ocean Drilling & Exploration Co.	1.9	2,200
Ocean Oil & Gas Co.	1.9	46,000
Ocelot Industries, Ltd.	1.9	60,000
Ogilvy & Mather	3.7	35,000
Ohio Casualty Corp.	1.9	35,000
Ohio Edison Co.	1.9	600
Oklahoma Natural Gas Co.	1.9	150
Oscar Meyer & Co., Inc.	1.9	100
Outboard Marine Corp.	1.9	100
Overseas Shipholding Group, Inc.	1.9	85,000
Owens Corning Fiberglass Corp.	3.7	20,300
Owens-Illinois, Inc.	5.6	166,688
Pabst Brewing Co.	1.9	100
Paccar, Inc.	1.9	2,000
Pacific Gas & Electric Co.	3.7	116,100
Pacific Lighting Corp.	1.9	200
Pacific Northwest Bell Corp.	11.9	6,000
Pacific Plantronics	1.9	43,000
Pall Corp.	3.7	51,000
Palm Beach, Inc.	3.7	25,000
Pan American World Airways, Inc.	3.7	2,750
Panhandle Eastern Pipeline Co.	3.7	9,200
Parker Drilling Co.	5.6	11,000
Parker-Hannifin Corp.	3.7	15,300
Parker Pen Co.	3.7	70,000
Parsons (R.M.) Corp.	1.9	66,450
Payless Cashways, Inc.	5.6	112,500
Pay 'N' Pak Stores, Inc.	3.7	111,200
Peabody Int. Corp.	3.7	21,110
Peoples Energy Corp.	1.9	8,000
Peoples Gas Co.	1.9	299
Peavey Co.	1.9	5,000
Penney (JC) Co.	16.7	725,500
Pennwalt Corp.	1.9	67,800
Pennzoil Co.	5.6	33,000
Pentair, Inc.	1.9	40,000
Pepsico Inc.	16.7	188,421
Perkin Elmer Corp.	1.9	200
Petrie Stores	1.9	10,000
Petrolite Corp.	3.7	91,000
Pfizer, Inc.	14.8	114,200
Phelps Dodge Corp.	9.3	155,100
PHH Group Inc.	3.7	147,900
Philadelphia Electric Co.	1.9	800
Philadelphia Suburban Corp.	1.9	8,000
Philip Morris	33.3	426,190
Phillips Petroleum Co.	29.6	203,700
Pic 'N' Save Corp.	3.7	28,000
Pillsbury Co.	7.4	180,456
Pioneer Hi-Bred Int'l Inc.	1.9	73,000
Pitney Bowes Inc.	9.3	15,800
Pittsburgh National Corp.	5.6	14,000
Pittston Co.	13.	65,350
Pogo Producing Co.	1.9	244,000
Polaroid Corp.	5.6	60,300
Portec, Inc.	1.9	2,205
Potlatch Corp.	1.9	200
PPG Industries	3.7	20,350
Precision Castparts Corp.	1.9	40,500
Prentice-Hall, Inc.	3.7	68,984
Printronix, Inc.	3.7	59,200
Proctor & Gamble	24.	82,955
Prudential Building Maintenance Corp.	1.9	29,691
Public Service Co. of Indiana, Inc.	3.7	36,300
Pullman, Inc.	5.6	26,100
Pulte Home	1.9	2,100
Purex Industries, Inc.	3.7	2,300
Puritan Bennett Corp.	1.9	114,000
Quaker Oats Co.	5.6	63,200
Quality Care, Inc.	1.9	60,000
Questor Corp.	1.9	100
Rainier Bancorporation	1.9	40,000
Ralston Purina Co.	7.4	91,300
Ramada Inns, Inc.	1.9	300
Raychem	11.1	213,500
Raymond International, Inc.	1.9	50,000
Raytheon Corp.	27.8	140,000
RCA Corp.	3.7	60,600
Reading & Bates Corp.	3.7	1,700
Redman Industries, Inc.	1.9	100
Reliance Electric Co.	1.9	200
Republic Steel Corp.	1.9	200
Republic of Texas Corp.	3.7	68,000
Revco (D.S.), Inc.	11.1	159,400
Revere Copper & Brass, Inc.	1.9	100
Revlon, Inc.	9.3	26,800
Rexnord, Inc.	1.9	200
Reynolds Metals	3.7	4,200
Reynolds (RJ) Industries	13.0	116,000
Reynolds & Reynolds	1.9	144,000
Rio Grande	1.9	3,800
Rite Aid Corp.	5.6	177,400
Roadway Express, Inc.	5.6	5,000
Robinson Nugent, Inc.	1.9	36,000
Rockwell International Corp.	1.9	400
Rohm & Haas Co.	3.7	89,500
Rohr Industries, Inc.	1.9	50,000
Roper Corp.	1.9	100
Rorer Group, Inc.	1.9	20,000
Royal Crown Cos.	1.9	1,400
Royal Dutch Petroleum Co.	7.4	15,000
Rouse Co.	1.9	95,000
Rowan Cos.	7.4	227,000
Ryan Homes, Inc.	3.7	131,000
Ryland Group, Inc.	1.9	4,400
Sabine Corp.	5.6	30,555
Safeco Corp.	7.4	45,250
Safety Kleen Corp.	1.9	46,000
Safeway Stores, Inc.	1.9	300
Saint Joe Minerals	5.6	19,200
Saint Paul Cos.	9.3	72,810
Saint Regis Paper Co.	7.4	68,400
Sanders Associates, Inc.	5.6	38,000
Santa Fe Industries	5.6	61,300
Santa Fe International Corp.	5.6	57,200
Savin Corp.	3.7	10,000
Schering Plough	14.8	108,200
Schlumberger	37.	124,450
SCI Systems, Inc.	1.9	62,625
Scientific Atlanta, Inc.	3.7	16,550
Scoa Industries, Inc.	1.9	60,000
Scott & Feltzer Co.	1.9	30,200
Scott, Foresman & Co.	1.9	100
Scott Paper Co.	3.7	9,400
Seaboard Coast Line Ind.	1.9	100
Sea Containers, Inc.	1.9	2,400
Seagram Co., Ltd.	3.7	300
Sealed Power Corp.	1.9	10,000
Searle, G. D. & Co.	3.7	45,500
Sears Roebuck & Co.	13.	161,822
Security Pacific Corp.	3.7	165,000
Sedco	1.9	100
Sensormatic Electronics Corp.	5.6	21,600
Sequoia Capital II	1.9	1
Service Inds., Inc.	3.7	2,000
Shared Medical Systems Corp.	3.7	71,000
Shell Oil Co.	7.4	56,000
Sherwin Williams Co.	1.9	100
Signal Cos.	7.4	63,500
Signode Corp.	3.7	49,125
Simmonds Precision Products	1.9	71,000
Singer Co.	1.9	200

What stocks they hold

Stock	% of Respondents Holding	Number of Shares Held
Skyline Corp.	1.9	100
Smith International, Inc.	7.4	39,300
SmithKline Corp.	22.2	133,500
Southern Calif. Edison	5.6	18,600
Southern Co.	1.9	1,400
Southern Natural Resources	7.4	16,100
Southern Pacific Co.	7.4	6,700
Southern Railway Co.	13.	48,800
Southland Corp.	7.4	46,136
Southland Royalty Co.	9.3	84,000
Southwestern Life Corp.	1.9	20,000
Spectra-Physics, Inc.	1.9	35,100
Sperry Corp.	7.4	21,900
Sperry-Rand Corp.	9.3	60,850
Springs Mill, Inc.	1.9	100
Square D Co.	11.1	207,233
Squibb Corp.	5.6	24,000
Staley (A.E.) Mfg. Co.	3.7	44,000
Standard Brands Paint Co.	9.3	57,300
Standard Oil of Calif.	31.5	141,000
Standard Oil of Indiana	33.3	247,599
Standard Oil of Ohio	16.7	76,747
Standard Pacific	1.9	16,300
Stanley Works	5.6	18,500
Stauffer Chemical	13	152,000
Stevens (JP) & Co.	1.9	110
Sterling Drug Co.	5.6	34,200
Storage Tech. Corp.	1.9	7,500
Storer Broadcasting	1.9	17,000
Sunbeam Corp.	3.7	2,200
Sun Chemical	1.9	24,400
Sun Oil Co.	1.9	11,000
Sun Electric Corp.	5.6	78,000
Sunstrand Corp.	5.6	96,000
Superior Oil Co.	9.3	56,125
Supermarkets General Corp.	1.9	3,000
SuperVain Stores, Inc.	1.9	60,000
Suppron Energy Corp.	3.7	125,000
Sybron Corp.	1.9	7,500
Syntex Corp.	9.3	65,100
Sysco Corp.	1.9	1,500
Taft Broadcasting Co.	3.7	10,100
Tandem Computers, Inc.	3.7	102,850
Tandy Corp.	9.3	154,900
Teck, Ltd.	1.9	100,000
Tektronix, Inc.	7.4	26,800
Teleco Oil Field Services, Inc.	1.9	100,000
Teledyne, Inc.	3.7	10,608
Telesciences, Inc.	1.9	772,226
Tenneco, Inc.	11.1	52,500
Teradyne, Inc.	1.9	155,000
Texaco, Inc.	9.3	110,656
Texaco Canada, Inc.	1.9	22,000
Texas Commerce Bancshares	1.9	8,000
Texas Eastern Corp.	7.4	61,200
Texas Gas Transmission Corp.	9.3	123,900
Texasgulf, Inc.	3.7	5,300
Texas Instruments, Inc.	7.4	16,700
Texas Oil & Gas Corp.	7.4	62,400
Texas Utilities Co.	9.3	304,340
Textron, Inc.	5.6	30,300
Thiokol Corp.	3.7	29,200
Thomas & Betts Corp.	3.7	3,600
Thomson (Walter)	1.9	10,000
Tidewater, Inc.	1.9	50,000
Tiger International, Inc.	3.7	95,000
Time, Inc.	3.7	28,242
Times Mirror Co.	3.7	6,300
Timken Co.	3.7	1,100
Todd Shipyards Corp.	3.7	28,000
Toys R US	3.7	75,000
Trane Co	5.6	98,216
Transamerica Corp.	11.1	134,600
Transco Cos., Inc.	7.4	51,000
Trans-Industries, Inc.	1.9	188,325
Transway International Corp.	1.9	4,000
Trans World Corp.	1.9	128,000
Traveler's Corp.	7.4	16,900
Triad Systems Corp.	3.7	9,650
Trimac, Ltd.	1.9	45,600
TRW, Inc.	7.4	20,300
Turbo Resources, Ltd	3.7	169,000
Twentieth Century Fox	5.6	106,900
Tyco Laboratories,Inc.	1.9	10,000
Tymshare, Inc.	1.9	10,000
UAL, Inc.	20.4	1,[illegible]0
UMC Industries, Inc.	1.9	100
Union Camp Corp.	7.4	177,215
Union Carbide Corp.	11.1	50,929
Union Oil of Calif.	16.7	140,800
Union Pacific Corp.	22.2	68,500
Uniroyal, Inc.	1.9	300
United Energy Resources, Inc.	3.7	33,000
United Foods, Inc.	1.9	49,000
United Keno Hills Mines, Ltd.	1.9	27,000
U.S. Bancorporation	1.9	4,000
U.S. Fidelity & Guaranty Co.	11.1	72,990
United States Gypsum Co.	1.9	200
U.S. Home	3.7	30,100
U.S. Steel Corp.	7.4	17,900
U.S. Surgical Corp.	1.9	53,000
U.S. Tobacco Co.	3.7	53,600
United Technologies Corp.	13.	95,200
United Telecommunications	9.3	61,200
Universal Foods Corp.	1.9	81,650
Upjohn Co.	7.4	16,600
Utah Light & Power Co.	1.9	9,700
Vallen Corp.	1.9	45,000
Van Dusen Air, Inc.	1.9	47,000
Varco International, Inc.	1.9	55,000
Varian Associates	1.9	3,000
Vermont American Corp.	1.9	93,000
VF Corp.	1.9	100
Virginia Electric & Power Co.	1.9	900
VSI Corp.	1.9	52,000
Wachovia Corp.	1.9	18,000
Walgreen Co.	1.9	57,500
Wal-Mart Stores, Inc.	3.7	81,500
Walter (Jim) Corp.	1.9	42,300
Warner Communications, Inc.	5.6	45,133
Warner Lambert Co.	9.3	294,550
Waste Management, Inc.	7.4	17,000
Waters Associates, Inc.	1.9	2,600
Watkins Johnson	3.7	22,400
Weatherford International, Inc.	1.9	3,000
Weis Markets, Inc.	1.9	39,500
Weldwood of Canada, Ltd.	1.9	42,600
Wells Fargo Co.	9.3	172,466
West Point-Pepperell, Inc.	3.7	6,500
Western Airlines, Inc.	1.9	54,200
Western Bancorp	5.6	41,350
Western Casualty & Surety Co.	1.9	32,700
Western Co. of North America	9.3	95,750
Westinghouse Electric Corp.	3.7	44,900
Westmoreland Coal Co.	5.6	68,100
Westvaco Corp.	1.9	200
Weyerhaeuser Co	16.7	206,480
Whirlpool	7.4	60,400
White Consolidated Industries,	1.9	50,100
White Motor Corp.	1.9	100
Wiley (John) & Sons	1.9	56,400
Williams Cos.	3.7	300
Winns Stores, Inc.	1.9	64,000
Wisconsin Electric Power Co.	5.6	38,200
Woolworth (F.W.) Co.	3.7	20,300
Woodhead (Daniel), Inc.	1.9	86,250
W. R. Grace & Co.	1.9	400
Xerox	31.5	177,845
Yellow Freight Systems, Inc.	3.7	84,900
Zapata Corp.	3.7	226,354

The favorite fifty

Stock	Rank 1980	Rank 1979	% of Respondents Holding	No. of shares Held
IBM	1	1	86.7	596,072
Atlantic Richfield	2	9	55.6	318,000
AT&T	3	2	50.0	468,105
Exxon Corp.	4	3	46.3	482,989
Schlumberger, Ltd.	5	19	37	124,450
General Electric Co.	6	4	35.2	350,562
Philip Morris	7	7	33.3	426,190
Standard Oil of Indiana	8	21	33.3	247,599
K-Mart Corp.	9	8	31.5	593,196
Caterpillar Tractor Co.	10	15	31.5	316,487
Xerox Corp.	11	13	31.5	177,845
Standard Oil of California	12	33	31.5	141,000
American Home Products Corp.	13	18	29.6	227,650
Phillips Petroleum	14	11	29.6	203,700
Dow Chemical Co.	15	23	27.8	585,516
Eastman Kodak Co.	16	6	27.8	297,908
Raytheon Co.	17	—	27.8	140,000
Halliburton Co.	18	28	24.1	104,600
Proctor & Gamble Co.	19	30	24	82,955
Minnesota Mining & Manufacturing	20	17	22.2	258,031
General Motors Corp.	21	32	22.2	211,209
Motorola, Inc.	22	—	22.2	199,962
Citicorp	23	5	22.2	172,500
Digital Equipment Corp.	24	—	22.2	141,400
SmithKline Corp.	25	—	22.2	133,500
Merck & Co.	26	10	22.2	91,410
Coca-Cola Co.	27	22	22.2	92,150
Union Pacific Corp.	28	—	22.2	68,500
Beatrice Foods Co.	29	—	20.4	690,475
Emerson Electric Co.	30	24	20.4	244,400
Johnson & Johnson	31	—	20.4	205,529
Dressler Industries	32	—	20.4	120,500
Burroughs Corp.	33	14	20.4	102,900
UAL, Inc.	34	—	20.4	1,300
Georgia Pacific Corp.	35	31	18.5	360,808
Boeing Co.	36	—	18.5	221,900
J. P. Morgan	37	—	18.5	174,100
Conoco, Inc.	38	—	18.5	148,400
Baker International	39	—	18.5	146,701
J. C. Penney Co.	40	—	16.7	725,500
Hughes Tool Co.	41	—	16.7	252,650
Weyerhaeuser Co.	42	—	16.7	206,480
Pepsico, Inc.	43	16	16.7	188,421
Union Oil of California	44	—	16.7	140,800
Getty Oil Co.	45	—	16.7	94,500
Standard Oil of Ohio	46	—	16.7	76,747
Colgate Palmolive Co.	47	42	14.8	446,870
Chesebrough Ponds, Inc.	48	—	14.8	218,800
Monsanto Co.	49	—	14.8	202,427
Gulf Oil Corp.	50	27	14.8	155,288

The drop-outs

Albertson's, Inc.
American Security & Trust
Bassett Furniture Industries
Beverly Enterprises
Brown Group
Burns (R.L.) Group
Cafeterias, Inc.
Canadian Superior Oil
Carrier Corp.
Chemical N.Y. Corp.
Chart House
Cherry Elect. Products
Chicago Bridge & Iron Co.
Coleman Co.
Combined Communications
Commerce Clearing House
Compugraphic Corp.
Computer Automation
Computer Communications
Communications Satellite
Comten, Inc.
Cordis Corp.
Corroon & Black
Covington Brothers
Crush Int.
Cullinane
Cullum Cos.
Dictaphone Corp.
Donnelley & Sons Co.
Dun & Bradstreet Cos., Inc.
Eagle-Picher Industries
Employee Benefit, Inc.
Entenmanns, Inc.
First United Bancorporation
Fischbach & Moore, Inc.
Fischer Scientific
Fluke (John) Manufacturing
Fort Howard Paper
Friendly Ice Cream
General Exploration
General Public Utilities
General Refractories
Gordon Jewelry
Graco, Inc.
Grantree Corp.
Gray Drug Stores
Hall (Frank S.) & Co.
Hanna Mining
Harvey Hubbell, Inc.
Houdaille Industries
Houston Oil & Minerals
Hunt Manufacturing
Int. Multifoods
Itel Corp.
Jerrico, Inc.
Jostens, Inc.
Knogo Corp.
Loehmanns, Inc.
Longs Drug Stores
Mallory (P.R.) & Co.
Mallinckrodt, Inc.
Malone & Hyde
Marley Co.
Mattel, Inc.
McCormick & Co.
Medenco, Inc.
Mercantile Bankshares
Mission Insurance Group, Inc.
Modern Merchandising
Mount Vernon Mills
MSI Data
National Airlines
National Steel
Newport Pharmaceuticals, Inc.
Numac Oil & Gas Ltd.
Pacific Petroleum
Pacific Telephone & Telegraph Co.
Pneumo Corp.
Purolator, Inc.
Rainier Bancorporation
Rollins, Inc.
Rollins Burdick Hunter
Rubbermaid, Inc.
Rust Craft Greeting Cards
Siebels Bruce Group, Inc.
Siebens Oil & Gas
Skaggs Cos
Southern Union
Spector Industries, Inc.
Standard Register
Stewart Sandwiches
Toro Co.
Total Petroleum N.A., Ltd.
TransUnion
Tropicana Products, Inc.
UNC Resources
United Financial Corp.
UV Industries
Valley National Bank of Arizona
Victoria Stations, Inc.
Wallace-Murray
Welltech, Inc.
Western Publishing Co., Inc.
Wheelabrator-Frye
Wiltech, Inc.
Zenith National Insurance
Zenith Radio

The drop-ins

ACF Industry, Inc.
Acme Cleveland Corp.
Airborne Freight
Alberta Gas Trunk Line, Ltd.
Alco Standard Co.
Alexander & Baldwin, Inc.
American Quasar Petroleum Co.
Ametek, Inc.
Ampex Common
Anglo Co., Ltd.
Apache Corp.
Arts Way Manufacturing Co.
Augat, Inc.
Automatic Switch Co.
Avantek, Inc.
Baldor Electric
Belco Petroleum Corp.
Bergen Brunswig
Bio-Rad Labs
Biochem Int., Inc.
Biomedical Reference Labs
Brenda Mines, Ltd.
Brockway Glass Co.
Brunswick Corp.
Caldor, Inc.
Central Louisiana Energy
Centran Corp.
Champion Spark Plug Co.
Charter N.Y. Corp.
Columbia Gas System, Inc.
Communications Industries, Inc.
Community Psychiatric Centers
Computer Sciences Corp.
Comshare, Inc.
Consolidated Foods Corp.
Continuous Curve Contact Lenses, Inc.
Core Industries
Cray Research, Inc.
Cross & Trucker Co.
Crutcher Resources
Datapoint Corp.
Dean Foods Co.
Diebold
Dillingham
Dorchester Gas Corp.
Eastern Gas Fuel Associates
El Paso Co.
Employers Casualty Co.
Ethyl Corp.
Ex-Cello-O
Farmers Group, Inc.
Federal Express
Florida Power & Light Co.
Frontier Airlines, Inc.
Gannett Co.
General Automotive Parts
General Dynamics Corp.
General Instruments Corp.
Geosource
GK Technologies
Global Marine
Gulf Canada Ltd.
Haemonetics, Inc.
Harcourt Brace Jovanovich, Inc.
Harland (John) Co.
Harsco Corp.
Harte Hanks
Health-Tex, Inc.
Heinz (H. J.) Co.
Heizer Corp.
Hershey Foods Corp.
Ideal Basic Industries
Instrumentation Laboratory
Intersil Common
Jewel Cos., Inc.
Kellogg Co.
Kevex Corp.
Keystone Int., Inc.
Kroy Industries, Inc.
LaQuinta Motor Inns, Inc.
Lancanna Mining Corp.
Leaseway Transportaton
Lenox, Inc.
Liberty Corp.
Lindberg Corp.
Lockheed Corp.
Macy (R. H.) & Co.
Masonite Corp.
May Petroleum, Inc.
MCA, Inc.
McFarland Energy

The drop-ins

McMoran Oil & Gas Co.
Measurex Corp.
Medtronic, Inc.
Merland Explorations, Ltd.
Metpath, Inc.
MGIC Investment Corp.
Microdyne Corp.
Midland Ross Corp.
Miller-Wohl Co., Inc.
Monarch Capital Corp.
Moran Brothers, Inc.
MTS Systems Corp.
Murphy Oil Corp.
National Data Corp.
National Distillers & Chemical Corp.
Norcen Energy Resources, Ltd.
Nordstrom, Inc.
Norton Simon, Inc.
Ocean Drilling & Exploration Co.
Ocean Oil & Gas Co.
Ocelot Industries, Ltd.
Overseas Shipholding Group, Inc.
Owens-Illinois, Inc.
Paccar, Inc.
Pacific Northwest Bell Corp.
Palm Beach, Inc.
Peavey Co.
Pennwalt Corp.
Philadelphia Suburban Corp.
Pic 'N' Save Corp.
Precision Castparts Corp.
Printronix, Inc.
Pulte Home
Puritan Bennett Corp.
Quality Care, Inc.
Republic Steel Corp.
Reynolds Metals Corp.
Robinson Nugent, Inc.
Ryland Group, Inc.
Sabine Corp.
Safety Kleen Corp.
Sanders Associates, Inc.
Santa Fe International Corp.
Scoa Industries, Inc.
Scott Paper Co.
Seagram Co., Ltd.
Sealed Power Corp.
Sensormatic Electronics Corp.
Sequoia Capital II
Shared Medical Systems Corp.
Spectra-Physics, Inc.
Standard Pacific
Storer Broadcasting
Sun Oil Co.
Sysco Corp.
Taft Broadcasting Co.
Tandem Computers, Inc.
Tech, Ltd.
Teleco Oilfield Services, Inc.
Teradyne, Inc.
Texaco Canada, Inc.
Thiokol Corp.
Tidewater, Inc.
Timken Co.
Todd Shipyards Corp.
Transway Int. Corp.
Triad Systems Corp.
Trimac, Ltd.
Turbo Resources, Ltd.
Tyco Labs, Inc.
United Energy Resources
United Keno Mines, Ltd.
U.S. Bancorporation
United States Gypsum Co.
U.S. Surgical Corp.
Utah Power & Light Co.
Vallen Corp.
Van Dusen Air, Inc.
Varian Associates
Vermont American Corp.
Walgreen Co.
Wang Labs, Inc.
Waters Associates, Inc.
Watkins Johnson
Weatherford Int., Inc.
Weis Markets, Inc.
Weldwood of Canada
Western Casualty & Surety Co.
White Consolidated Industries, Inc.
Winns Stores, Inc.
Zapata Corp.

NOTE

ONLY THE FOLLOWING PAGES OF THIS PUBLICATION

HAVE BEEN FILMED

Cover 1, p. 2,

55-65.

AUGUST 1980

Pension World

The Magazine for Plan Sponsors / A Publication of Communication Channels Inc

8/12/80 C 2425-1 U-

0 * * 0842413 PA
CONGRESSIONAL INFORMATION * *
7101 WISCONSIN AVE
WASHINGTON DC 20014

United Technologies beams $2.3 billion pension fund

An investment manager views the eighties

Seventh Annual Survey of State Retirement Systems

BEST AVAILABLE COPY

August 1980

Pension World

Volume 16, Number 8

The Magazine for Plan Sponsors / *A Publication of Communication Channels, Inc.*

Joseph Shore
President
Cyril Lee Ellison
Publisher
Harvey Bandremer
Associate Publisher
Diana H. P. Roberts
Editor
Marie Powers
Assistant Editor
Steven E. Schanes
Editorial Consultant
Charles E. Lloyd
Advertising Director
Martin Greene, Production Director
Fran Rappaport, Production Mgr.
Brian Buxton, Art Director
Elmer Dalton, Circulation Director
Joan Robinson, Circulation Mgr.

Contributing Editors

Ronald Derven **Noel Arnold Levin**
Morris Stone **Ernest Quickel**
Robert A. Levy

Editorial Advisory Board

Clayton A. Boggan, Jr.
Wachovia Bank & Trust Company
Eugene B. Burroughs
International Brotherhood of Teamsters
Ernest J. E. Griffes
Levi Strauss & Company
Fred Halperin
Coldwell Banker R.E. Mgmt. Services
Michael F. Klein, Jr.
Price Waterhouse & Company
Jack H. Leylegian II
Bank of America NT&SA
Ray L. Lillywhite
Alliance Capital Management
Matthew M. Lind
Travelers Insurance Companies
Malcolm D. MacKinnon
Prudential Insurance Company
Jeffrey D. Mamorsky
Vedder, Price, Kaufman, Kammholz & Day
Judith F. Mazo
Burns Jackson Miller Summit & Jacoby
Paul T. Shultz
Towers, Perrin, Forster & Crosby
Michael N. Thome
Calif. Teachers' Retirement System
Kenneth W. Tolo
University of Texas
Anthony Wilson
Continental Ill. National Bank

FEATURES

12 **Engineering a $2.3 billion pension fund portfolio** **by Ronald Derven**
Strategies that have kept United Technologies soaring in pension fund management.

19 **Managing a $13 billion state retirement fund** ***Pension World*** **interview**
A discussion with the director of investments for the New York State Common Retirement Fund.

24 **Perspective on the 1980's** **by Eugene H. Vaughan, Jr.**
An investment manager looks at the future in investment management.

28 **What should be *vs.* what can be** **by Dallas L. Salisbury**
Implications of the Interim Report of the President's Commission on Pension Policy.

33 **Good as gold** **by Marie Powers**
Alaska's reformation of pension investment statutes.

43 **Investment lessons from a teachers fund** **by Marie Powers**
How the Minneapolis Teachers Retirement Fund keeps abreast of inflation through real estate.

47 **Universal Social Security — Has its time come?**
by Thomas J. Cavanaugh, Richard C. Murphy, and Robert E. Wallace
A summary and analysis of the 276-page study published by the Universal Social Security Coverage Study Group.

55 **7th Annual Survey of State Retirement Systems**
How state portfolios are structured; where the money is; who's managing it.

66 **When the IRS knocks** **by Leo Brown and Jeffrey D. Mamorsky**
What Every Fiduciary Should Know gives you Part II of how to cope with an IRS audit of your employee benefit plan.

DEPARTMENTS

5 **International Pension World**
10 **Washington Newsletter**
37 **Pension News**
40 **Pension People**
42 **Meetings and Conventions**

Cover: In ten years, the United Technologies pension fund has skyrocketed from $600 million to $2.3 billion. How the company has managed the growth begins on page 12.

BPA

Pension World is published monthly by Communication Channels, Inc., Joseph Shore, President; B.J. Kotsher, Executive Vice President, Betty Dornbush, Treasurer. Editorial and advertising offices at 6285 Barfield Road, Atlanta, GA 30328. Telephone (404) 256-9800. Pension World is a registered trademark of Communication Channels, Inc. © 1980 by Communication Channels, Inc. Controlled circulation postage paid at Shepherdsville, KY (USPS 502-110) and Atlanta, GA (USPS 410-030). Subscription rates: U.S.A., 1 year, $34; 2 years, $59; Canada and Mexico, 1 year, $36; Foreign, 1 year, $42. Single copies, $3.00. The opinions expressed by authors and contributors to Pension World are not necessarily those of the editors or publisher. Articles appearing in Pension World may not be reproduced in whole or in part without the express permission of the publisher. Microfilm copies of Pension World are available from University Microfilms, 300 North Zeeb Road, Ann Arbor, MI 48106. Postmaster: Please send form 3579 to Circulation Department, Pension World, 6285 Barfield Road, Atlanta, GA 30328.

Exclusive

7th Annual Survey

State Retirement Systems

Every state is represented in *Pension World's* 1980 State Retirement Survey. Though figures from a few individual systems were not available, each state is represented by at least one system.

Many funds have significantly increased their use of external advisers since last year; 26 percent of the systems reporting from last year added for the first time or increased their use of investment advisers. Some of these have no actual investment authority, but many are managers for the equities and/or fixed-income portfolios.

Several funds have made dramatic gains: the Florida, Indiana, Montana and New Mexico public retirement systems and the Texas teachers fund increased holdings, on a dollar for dollar basis, by more than 25 percent, while Colorado, Mississippi and Tennessee increased holdings by more than 30 percent.

Several points are worth noting for accurate interpretation of the data:

- All figures are at cost, unless otherwise noted, and are based on completed responses to the *Pension World* survey.
- Investments included in the "Other" category, where itemized by individual systems, include special state savings certificates, receivables, dividends, Canadian bonds, all foreign instruments, internal loans to employees, GIC's and real property.
- Where individual breakdowns were available, government-insured mortgages have been included in the "Mortgage" category; however, several states noted that these mortgages were lumped under their figures for "U.S. Government Securities."

Name & Address of fund	Contact person	Total assets (in millions)	Common stock (in millions)	Preferred stock (in millions)	U.S. Govt. securities (in mills)
The Retirement Systems of Alabama 135 South Union Street Montgomery, AL 36130 205/832-4140	David G. Bronner Secretary-Treasurer	$ 2,000	$ 58	$	$ 380
Alaska Public Employees Retirement System Department of Revenue, Treasury Division Pouch SB Juneau, AK 99811 907/465-2351	Anselm Staack Treasury Comptroller	386.0	40.6		82.9
Alaska Teachers Retirement System Department of Revenue, Treasury Division Pouch SB Juneau, AK 99811 907/465-2351	Anselm Staack Treasury Comptroller	309.7	45.0		68.7
Arizona Public Safety Personnel Retirement System 3033 North Central Avenue Phoenix, AZ 85012	Lowell Sutton Administrator	304.7	78.1		15.4
Arizona State Retirement System P.O. Box 33910 Phoenix, AZ 85067 602/255-5131	Max Sullivan Director	1,477.9	308.2	1.9	285.4
Arkansas Public Employees Retirement System One Capitol Mall Little Rock, AR 72201 501/371-1405	Fred E. Henne Executive Director	342	20		36
Arkansas State Highway Employees Retirement System P.O. Box 2261 Little Rock, AR 72203	J. E. McCarthy Executive Secretary	85.8	5.6		12.5
Arkansas State Police Retirement System One Capitol Mall Little Rock, AR 72201 501/371-1485	Fred E. Henne Executive Secretary	18.8			3.3
Arkansas Teacher Retirement System Education Annex, State Capitol Grounds Little Rock, AR 72201 501/371-1517	Dwight Goodwin Assistant Director for Investments	452	66		28
California Legislators Retirement System 1416 Ninth Street, Room 642 Sacramento, CA 95814 916/445-7700	Curtis D. Ishii Management Services Technician	34.8 (bk.)	8.1 (bk.)	.5 (bk.)	
California Public Employees Retirement System 1416 Ninth Street, Room 642 Sacramento, CA 95814 916/445-7700	Curtis D. Ishii Management Services Technician	11,982.2 (bk.)	2,693.0 (bk.)	29.7 (bk.)	816.7 (bk.)
California State Teachers Retirement System 1416 Ninth Street, Room 642 Sacramento, CA 95814 916/445-7700	Curtis D. Ishii Management Services Technician	6,785.7 (bk.)	1,040.7 (bk.)	1.7 (bk.)	624.9 (bk.)
Public Employees Retirement Association of Colorado 1300 Logan Street Denver, CO 80203 303/832-9550	Joseph P. Natale Executive Secretary	1,942.3	345.8		206.4
Connecticut State Retirement Systems 20 Trinity Street Hartford, CT 06115 203/566-2126 or 566-3270	Lee Van Meter Deputy Treasurer of Investments	1,189 (mkt.)	441 (mkt.)		
Delaware State Employees Retirement Fund Office of Pensions Thomas Collins Building P.O. Box 1401 Dover, DE 19901 302/736-4208	Donald McArdle Administrator	206.8 (mkt.) 198.7 (bk.)	97.7 (mkt.)	.5 (mkt.)	19.2 (mkt.) 19.0 (bk.)
Florida Retirement System Trust Fund Division of Retirement Room 530 Carlton Building Tallahassee, FL 32304	A. J. McMullian, III State Retirement Director	3,700	240		176
Georgia State Retirement Systems 2 Northside 75 Atlanta, GA 30318 404/656-2151	Graham R. Lynch Director, Division of Investment Services	2,337	653		392
Employees Retirement System of the State of Hawaii 888 Mililani Street, Suite 502 Honolulu, HI 96813	Stanley Siu Administrator	1,144.1	169.8	1.3	245.3
Public Employee Retirement System of Idaho State House Boise, ID 83720 208/384-3365	T. F. Terrell Executive Director	264 258 (mkt.)	97 95 (mkt.)	5 4 (mkt.)	18 18 (mkt.)

BEST AVAILABLE COPY

Corporate bonds (in millions)	Mortgages (in millions)	Cash and short-term securities (in millions)	Other (in millions)	Reporting date	Investment advisers
$1,320	$	$140	$ 80	6/30/79	Internal Administration
33.3	140.3	86.9		4/30/80	Internal Administration/Alliance Capital Management Corp.; Morgan Guaranty
26.6	122.0	49.2	.2	4/30/80	Internal Administration/Alliance Capital Management Corp.; Morgan Guaranty
159.1		50.4	1.7	6/30/79	Internal Administration
348.7	90.2	446.5		6/30/79	Bernstein-Macaulay, Inc.; First Pennsylvania Bank; Funds Advisory Company; INVESCO Capital Management, Inc.; Kemper Financial Services, Inc.; Scudder, Stevens & Clark, Inc.; Valley National Bank
209	84	10	3	3/31/80	Loomis, Sayles & Company
43.9		0.9	1.4	3/31/80	Loomis, Sayles & Company
11.2	2.6	.7	1	3/31/80	Loomis, Sayles & Company
127	45	178		5/5/80	Oppenheimer Capital Corporation
8.6 (bk.)	16.5 (bk.)	.8 (bk.)	.3 (bk.)	12/31/79	Internal Administration
4,535.0 (bk.)	2,970.0 (bk.)	436.8 (bk.)	471.3 (bk.)	12/31/79	Internal Administration
2,823.5 (bk.)	1,748.7 (bk.)	230.0 (bk.)	296.2 (bk.)	12/31/79	Internal Administration
1,001	238.7	98.8	53.8	6/30/79	Internal Administration/Alliance Capital Management Corp.
748 (mkt.)				3/31/80	David L. Babson & Company, Inc.; Connecticut Bank & Trust; Bernstein-Macaulay, Inc.; Capital Guardian Trust Co.; National Investment Services of America; Scudder, Stevens & Clark; Harris Trust
9.7 (mkt.) 9.4 (bk.)		44.0 (mkt.) 42.3 (bk.)	35.1 (mkt.) 33.8 (bk.)	6/30/79	Internal Administration/Delphi Management, Inc.
2,907		377		3/31/80	Internal Administration
1,166	49	58	19	3/31/80	Citizens & Southern National Bank; First National Bank of Atlanta
329.1	331.3	43.8	23.8	6/30/79	Delaware Investment Advisers; Safeco Asset Management; Bankers Trust; Scudder, Stevens & Clark, Inc.; Pacific Investment Management Co., Fayez Sarofim & Co.; Bernstein-Macaulay, Inc.
83 79 (mkt.)	8 8 (mkt.)	32 32 (mkt.)	22 23 (mkt.)	6/30/79	Alliance Capital Management Corp.; Bank of Idaho, N.A.; Equitable Life Assurance Society; First Security Bank of Idaho; Idaho Bank and Trust Company; Idaho First National Bank; Prudential Insurance Co.; Trident Investment Mgmt.

BEST AVAILABLE COPY

Name & Address of fund	Contact person	Total assets (in millions)	Common stock (in millions)	Preferred stock (in millions)	U.S. Govt. securities (in mills)
Illinois State Board of Investments General Assembly Fund, Judges Retirement Fund, State Employees Retirement System Fund 180 North LaSalle Chicago, IL 60602 312/793-9718	Robert Harmon Director	$841.8 (mkt.)	$144.4 (mkt.)	$1.1 (mkt.)	$195.3 (mkt.)
State Universities Retirement System of Illinois 50 Gerty Drive Champaign, IL 61820 217/333-3860	Charles M. Hundley Assistant Director	809.0	348.2		95.2
Teachers Retirement System of the State of Illinois P.O. Box 4057 2815 West Washington Springfield, IL 62708 217/753-0311	Roy A. Baker Director	2,404	668		566
Indiana Judges Retirement System 143 West Market Street, #800 Indianapolis, IN 46204 317/633-4000	C. Philip Barnes Assistant Executive Secretary	5.6			5.6
Indiana Public Employees Retirement Fund 800 Harrison Building 143 West Market Street Indianapolis, IN 46204	Harold J. Egenes Executive Secretary	674.2			113.3
Indiana State Police Pension Fund 242 State House Indianapolis, IN 46204 317/232-6386	W. A. Owen Investment Adviser	39.2			.3
Indiana State Teachers Retirement Fund 506 State Office Building Indianapolis, IN 46204 317/633-6582	Edmond G. Niehoff Assistant Executive Secretary	466			93
Iowa Peace Officers Retirement System State Treasurer's Office State Capitol Building Des Moines, IA 50319 515/281-5369	Roger G. Barnett Deputy Treasurer of State	20	1.5		4.7
Iowa Public Employees Retirement System 1000 East Grand Avenue Des Moines, IA 50319	Edward R. Longnecker Administrator	1,239	112		278
Kansas Public Employees Retirement System 400 First National Bank Tower One Townsite Plaza Topeka, KS 66603 913/296-3921	John K. Corkhill Executive Secretary	754.8 (mkt.)	232.1 (mkt.)	1.2 (mkt.)	95.2 (mkt.)
Kentucky Judicial Retirement System P.O. Box 791 Frankfort, KY 40602 502/564-5310	Robert K. Cullen Manager	19.3 (mkt.)	11.5 (mkt.)	.6 (mkt.)	4.1 (mkt.)
Kentucky Retirement Systems 226 West Second Street Frankfort, KY 40601	Mim C. Clark General Manager	640	167.2		226.2
Kentucky Teachers Retirement System 216 West Market Street Frankfort, KY 40601 502/564-3266	Pat N. Miller Executive Secretary	846.0	134.4		399.2
Municipal Employees Retirement System of Louisiana 6750 Van Gogh Avenue Baton Rouge, LA 70806	Janie Sue Byrd Administrative Dir.	41.1			15.2
Louisiana School Employees Retirement System P.O. Box 44516 Baton Rouge, LA 70804	J. Michael Dodds, III Assistant Secretary-Treasurer	194	4	1	47
Louisiana School Lunch Employees Retirement System 9131 Interline Avenue Building C, 2nd Floor Baton Rouge, LA 70809 504/925-6476	Shirlyn Kees Assistant Secretary-Treasurer	27.5 (bk.)	.01 (bk.)	.05 (bk.)	7.8 (bk.)
Louisiana State Employees Retirement System P.O. Box 44213 Baton Rouge, LA 70804	Vernon L. Strickland Director	771.8	44.0	31.8	289.3
Louisiana State Police Pension & Retirement Fund P.O. Box 66614 Baton Rouge, LA 70896	Richard J. Maciasz Manager	7.8			2.2
Teachers Retirement System of Louisiana P.O. Box 44123 Capitol Station Baton Rouge, LA 70804	Jennifer Netterville Investment Portfolio Specialist	1,300	21	2	299

BEST AVAILABLE COPY

Corporate bonds (in millions)	Mortgages (in millions)	Cash and short-term securities (in millions)	Other (in millions)	Reporting date	Investment advisers
$ 242.8 (mkt.)	$	$ .2 (mkt.)	$ 32.6 (mkt.)	6/30/79	Internal Administration
301.4		57.4	6.8	4/30/80	Harris Trust
1,087	23	36	54	3/31/80	Springfield Marine Bank
				3/31/80	Internal Administration
300.[illegible]	117	93.5		3/31/80	Indiana National Bank; American Fletcher National Bank
		35.6	3.3	4/30/80	Internal Administration
118	133	60	14	6/30/79	American Fletcher National Bank; Indiana National Bank; Alliance Capital Management Corp.; Bank of New York
8.8	2.1	3.0		4/30/80	Loomis, Sayles & Company
558	68	176	47	3/31/80	Internal Administration/Boston Co.; Alliance Capital Management Corp.; Capital Guardian Trust
135.9 (mkt.)		284.5	5.9	3/31/80	Oppenheimer Capital Corp.; Capital Supervisors; Investment and Capital Management; Montag and Caldwell; Reimer & Koger and Associates; Fourth National Bank
1.4 (mkt.)		1.7 (mkt.)		4/30/80	First Kentucky Investment Advisors
52	16.5	125.2	52.9	3/31/80	Capital Supervisors, Inc.
204.6	64.6	43.2		4/30/80	Todd Investment Advisors; Alliance Capital Management Corp.
14.1	.2	11.6		4/30/80	Fidelity National Bank of Baton Rouge
115		25	2	6/30/79	Hibernia National Bank
14 (bk.)		5.0 (bk.)	1.6 (bk.)	6/30/79	Hibernia National Bank
203.1	31.2	183.3	9.2	4/30/80	Todd Investment Advisors
3.5		.9	1.2	6/30/79	Hibernia National Bank
785	3	157	19	12/31/79	Scudder, Stevens, & Clark; Hibernia National Bank

BEST AVAILABLE COPY

Name & Address of fund	Contact person	Total assets (in millions)	Common stock (in millions)	Preferred stock (in millions)	U.S. Govt. securities (in mills)
Maine State Retirement System State Office Building Augusta, ME 04333 207/289-3481	William G. Blodgett Executive Director	$ 263.8	$ 106.7	$	$ 52.4 (bk.) 51.2 (mkt.)
Maryland State Retirement Systems State Office Center Baltimore, MD 21202	Howard J. France Investment Adm.	2,319.2	766.7		183.5
Commonwealth of Massachusetts State Employees Annuity Fund State Treasurers Office Room 1203 1 Ashburton Place Boston, MA 02108 617/727-2010	Philip D. Kett Chief Investment Officer	712.5	64.2 (bk.)		161.5
Commonwealth of Massachusetts State Teachers Annuity Fund State Treasurers Office Room 1203 1 Ashburton Place Boston, MA 02108 617/727-2010	Philip D. Kett Chief Investment Officer	841.9	65 (bk.)		216.5
Michigan Judges Retirement Fund Department of Treasury P.O. Box 15128 Lansing, MI 48901 517/373-3140	William A. Ammerman Director of Investments	23.9 (mkt.)	3.6 (mkt.)	.1 (mkt.)	7.7 (mkt.)
Michigan Legislative Retirement Fund P.O. Box 30036 Lansing, MI 48909	Thomas G. Baker Administrator	17 (mkt.)	.2 (mkt.)		3.5 (mkt.)
Michigan Municipal Employees Retirement System P.O. Box 30026 Lansing, MI 48909 517/373-0001	Kenneth E. Recker Finance Director	349.4 (bk.) 302.8 (mkt.)	48.7 (bk.) 46.0 (mkt.)		94.3 (bk.) 74.2 (mkt.)
Michigan Probate Judges Retirement Fund Department of Treasury P.O. Box 15128 Lansing, MI 48901 517/373-3140	William A. Ammerman Director of Investments	5.4 (mkt.)	1.1 (mkt.)		.9 (mkt.)
Michigan Public School Employees Chapter I Retirement Fund Department of Treasury P.O. Box 15128 Lansing, MI 48901 517/373-3140	William A. Ammerman Director of Investments	2,831.5 (mkt.)	509.9 (mkt.)	2.1 (mkt.)	318.9 (mkt.)
Michigan Public School Employees Chapter II Retirement Fund Department of Treasury P.O. Box 15128 Lansing, MI 48901 517/373-3140	William A. Ammerman Director of Investments	360.6 (mkt.)	25.4 (mkt.)	1.4 (mkt.)	31.0 (mkt.)
Michigan State Employees Retirement Fund Department of Treasury P.O. Box 15128 Lansing, MI 48901 517/373-3140	William A. Ammerman Director of Investments	934.7 (mkt.)	183.9 (mkt.)	.8 (mkt.)	106.9 (mkt.)
Michigan State Police Pension, Accident & Disability Fund Department of Treasury P.O. Box 15128 Lansing, MI 48901 517/373-3140	William A. Ammerman Director of Investments	79.6 (mkt.)	10.7 (mkt.)		20.7 (mkt.)
Minnesota State Board of Investment 55 Sherburne Avenue — Room 105 St. Paul, MN 55155 612/296-3328	Jonathan P. White Executive Secretary	2,940	1,263		24.7
Mississippi Deferred Compensation Fund Public Employees Retirement System of Mississippi 1704 Sillers State Office Bldg. Jackson, MS 39201 601/354-6737	Fred Walker Executive Secretary Charles D. Wilkinson Investment Manager	8.3			4.3
Mississippi Highway Safety Patrol Retirement Fund 1704 Sillers State Office Building Jackson, MS 39201 601/354-6737	Fred Walker Executive Secretary Charles D. Wilkinson Investment Manager	28.9			7.3
Public Employees Retirement System of Mississippi 1704 Sillers State Office Building Jackson, MS 39201 601/354-6737	Fred Walker Executive Secretary Charles D. Wilkinson Investment Manager	890.6			451.5
Missouri Highway Employees & Hwy. Patrol Retirement System P.O. Box 270 Jefferson City, MO 65102 314/751-2551	Irene Wollenberg Secretary to Board of Trustees	82.0	28.9	.9	24.1

BEST AVAILABLE COPY

Corporate bonds (in millions)	Mortgages (in millions)	Cash and short-term securities (in millions)	Other (in millions)	Reporting date	Investment advisers
$ 58.7 (bk.) 57.8 (mkt.)	$ 6.4	$13.1	$ 27.6	6/30/79	Alliance Capital Management Corp.; David L. Babson & Co.; Massachusetts Financial Services; Merchants National Bank of Bangor; Merrill Trust Co.; Morgan Guaranty Trust Co.; Putnam Advisory Co.; The Travelers Insurance Co.
994.4	62.7	310.0	1.9	3/31/80	Internal Administration
440		32	14.4	4/30/80	Internal Administration
498.6		44.6	18.9	4/30/80	Internal Administration
8.5 (mkt.)	.1 (mkt.)	3.6 (mkt.)		4/30/80	Internal Administration
9.9 (mkt.)		3.3 (mkt.)		4/30/80	Internal Administration
112.9 (bk.) 92.0 (mkt.)	48.7 (bk.) 48.0 (mkt.)	63.0 (bk.) 64.0 (mkt.)	14.0 (bk.) 9.8 (mkt.)	3/31/80	Internal Administration/Alliance Capital Management Corp.; American General Capital Management, Inc.; Investment & Capital Management Corp.
2.1 (mkt.)		1.1		4/30/80	Internal Administration
1,087.8 (mkt.)	416.1 (mkt.)	480.8 (mkt.)	15.7 (mkt.)	4/30/80	Internal Administration
128.8 (mkt.)	71.3 (mkt.)	41.7 (mkt.)	62.8 (mkt.)	4/30/80	Internal Administration
347.5 (mkt.)	149.0 (mkt.)	182.3 (mkt.)	4.1 (mkt.)	4/30/80	Internal Administration
29.4 (mkt.)	2.3 (mkt.)	15.3 (mkt.)	.9 (mkt.)	4/30/80	Internal Administration
870	283.3	330	187	3/31/80	Internal Administration
.05		4.0		3/31/80	Edie Asset Management
12.2		7.4		3/31/80	Edie Asset Management
403.5	4.8	30.8		3/31/80	Edie Asset Management
6.9	.2	10.5	12.8	3/31/80	United Missouri Bank of Kansas City

BEST AVAILABLE COPY

Name & Address of fund	Contact person	Total assets (in millions)	Common stock (in millions)	Preferred stock (in millions)	U.S. Govt. securities (in mills)
Public School Retirement System of Missouri P.O. Box 268 Jefferson City, MO 65102 314/425-7742	Warren M. Black Investment Adviser	$ 1,103	$ 173	$	$
Missouri State Employees Retirement System 900 Leslie Boulevard P.O. Box 209 Jefferson City, MO 65102 314/751-2342	Al F. Holmes, Jr. Executive Secretary Gerald T. Heller Accountant	234	53		59
Public Employees Retirement System Fund of Montana Room 236, Mitchell Building Helena, MT 59601 406/449-3856	Robert T. Bugni Securities Analyst	239.8	17.3		10.7
Teachers Retirement System Fund of Montana Room 236, Mitchell Building Helena, MT 59601 406/449-2656	Robert T. Bugni Securities Analyst	185.2	17.3		8.8
State of Nebraska Retirement Fund State Office Building Box 94695 Lincoln, NE 68509 402/471-2043	Donald J. Mathes State Investment Officer	118	12.8		48.0
Nevada Public Employees Retirement System 693 West Nye Lane Carson City, NV 89701 702/885-4200	Mary Matheus Investment Analyst I	712.2	66.4	6.2	12
New Hampshire Retirement System Gloudon Road Concord, NH 03301 603/271-2621	Ray Mills Accountant	282	92	1	71
New Jersey Division of Investment 349 West State Street Trenton, NJ 08625 609/292-5106	Roland M. Machold Director	5,575.2 (bk.) 5,040.2 (mkt.)	1,003.5 (bk.) 907.2 (mkt.)		836.9 (bk.) 756.0 (mkt.)
New Mexico Educational Retirement System P.O. Box 1029 Santa Fe, NM 87503 505/827-2618	Frank Ready Director	414.7 (bk.)	43.9 (bk.)		70.3 (bk.)
Public Employees Retirement Association of New Mexico P.O. Box 2123 Santa Fe, NM 87501 505/827-2618	Leonard T. Valdes Executive Secretary Ralph Miller Investment Officer	350.3	84.6		88.5
New York State Common Retirement Fund Governor A. E. Smith State Office Building Albany, NY 12236 518/474-6398	Madelon Talley Director/Division of Investment & Cash Management William Hay Chief Investment Officer	11,737.7 (bk.)	1,864.6 (bk.)		4,948.8 (bk.)
New York State Teachers Retirement System 143 Washington Avenue Albany, NY 12210 518/447-2666	Mason Kullman Director of Public Information	7,034.6 (bk.)	2,197.7 (bk.)		3,061.4
North Carolina Retirement Systems 325 North Salisbury Street Raleigh, NC 27611 919/733-7273	Christopher S. Moore Deputy Treasurer, Dir. Investment & Banking	4,215	495		977
North Dakota Public Employees Retirement Systems P.O. Box 1214 Bismarck, ND 58505 701/224-2975	Alan Person Executive Director	41.5	15.2		12.7
Police & Firemen Disability and Pension Board of Ohio 230 E. Town Street Columbus, OH 43215 614/228-4076	Richard F. Thompson Investment Manager	833	148		124
Public Employees Retirement System of Ohio 277 E. Town Street Columbus, OH 43215 614/466-7320	Robert A. McLaughlin Investment Officer	4,842	1,154.6	18.6	281.3
School Employees Retirement System of Ohio 88 East Broad Street Columbus, OH 43215 614/221-7012	R. Jack Cooper Investment Officer	899	169		20
The State Teachers Retirement System of Ohio 275 East Broad Street Columbus, OH 43215 614/469-9667	Alan D. Browning Director of Investments	4,802.9	1,710.9	1.7	268.4

BEST AVAILABLE COPY

Corporate bonds (in millions)	Mortgages (in millions)	Cash and short-term securities (in millions)	Other (in millions)	Reporting date	Investment advisers
$ 763	$	$ 31	$137	6/30/79	St. Louis Union Trust Co.; Research Management Associates
72	13	35	2	3/31/80	St. Louis Union Trust Co.; Research Management Associates
167.6	39.0	3.0	1.0	4/30/80	James R. Howeth Rodney G. Young
118.6	38.2	2	.3	4/30/80	James R. Howeth Rodney G. Young
57.2				6/30/79	Internal Administration
384	66.8	74.4	102	3/31/80	Funds Advisory Company
75	20	23		6/30/79	David L. Babson & Co. Inc.; Putnam Advisory Co., Inc.; State Street Research & Mgmt. Co.; First National Bank of Boston; Amoskeag National Bank
2,787.6 (bk.) 2,520.1 (mkt.)	557.5 (bk.) 504.7 (mkt.)	384.7 (bk.) 352.8 (mkt.)		6/30/79	Internal Administration
202.7 (bk.)	97.6 (bk.)		.2	3/31/80	Vaughan, Nelson, Hargrove, Inc.
96.2	15.0	66.2		4/30/80	Fiduciary Trust Company of New York
2,121.2 (bk.)	1,903.7	901.4		3/31/80	Internal Administration/Bank of New York; Chemical Bank; Morgan Guaranty Trust; Dreyfus Management; Alliance Capital Management; Lazard Freres & Company; Oppenheimer Capital Corp.; L. F. Rothschild, Unterberg, Towbin; J. & W. Seligman & Company
(bk./combined)	979.4 (bk.)	512.7 (bk.)	283.4 (bk.)	6/30/79	Internal Administration/Lionel D. Edie & Co.
2,690		52		3/31/80	Alliance Capital Management; Thorndike, Doran, Paine & Lewis; Duff & Phelps, Inc.
6.4		7.2		6/30/79	Wall, Patterson, McGrew & Richards, Inc.; Bank of North Dakota
333		115	113	3/31/80	Internal Administration/Alliance Capital Management Corp.
2,788.1	42.4	185.3	373.2	1/1/80	Internal Administration/Scudder, Stevens & Clark
355.2	206	73	75.8	3/31/80	Internal Administration/Bankers Trust Co.
1,261.9	1,061.4	471.2	7.4	4/30/80	Internal Administration

BEST AVAILABLE COPY

Name & Address of fund	Contact person	Total assets (in millions)	Common stock (in millions)	Preferred stock (in millions)	U.S. Govt. securities (in mills)
Teachers Retirement System of Oklahoma P.O. Box 53624 Oklahoma City, OK 73152 405/521-2387	Jo Witt Investment Officer	$453.5	$52.5	$	$75
Oregon Public Employee Retirement System 1099 S.W. Columbia Street Box 73 Portland, OR 97207 503/229-5624	James L. McGoffin Director	1,754.4	775.1		33.1
Pennsylvania Municipal Retirement System P.O. Box 1165 606-Executive House 101 South Second Street Harrisburg, PA 17108 717/787-2065	Robert C. Rosaman Secretary	42	7		5
Commonwealth of Pennsylvania Public School Employees Retirement System 301 Chestnut Street City Towers Harrisburg, PA 17101 717/787-6546	R. J. McElroy Director, Bureau of Fiscal Control	4,543.7	786.8	1.8	
Pennsylvania State Employees Retirement System 204 Labor and Industry Building Harrisburg, PA 17120 717/787-6293	Robert L. Cusma Secretary	2,893.8	554.9	2.2	7.2
State of Rhode Island Employees Retirement System 198 Dyer Street Providence, RI 02903 401/277-2203	Joseph G. Iannelli Executive Director	348.2	79.3	.4	70.6
South Carolina Retirement System P.O. Box 11960 Columbia, SC 29211 803/758-8552	Grady L. Patterson, Jr. State Treasurer	1,710			504
South Dakota Retirement System 222 East Capitol Pierre, SD 57501 605/773-3731	Al A. Asher Investment Analyst	203	88		82
Tennessee Consolidated Retirement System 960 Capital Hill Building P.O. Box 2867 Nashville, TN 37219 615/741-2643	H. Swift Lipscomb, Jr. Chief Investment Officer	1,596	371.8		524.3
Employees Retirement System of Texas P.O. Box 13207 Capital Station Austin, TX 78711 512/476-6431	Preston G. Craig Director of the Investment Division	1,393	173		357
Teacher Retirement System of Texas 1001 Trinity Street Austin, TX 78701 512/477-6711	Leonard Prewitt Executive Secretary	5,059.6	1,439.9	9.9	2,068.2
Utah State Retirement Fund 540 East 2nd South Salt Lake City, UT 84102 801/355-3884	Reed E. Gunderson Investment Officer	830.1	166.9		152.8
Vermont State Retirement System State Administration Building Montpelier, VT 05602 802/828-2305	Edwin C. Gallison Director of Retirement Services	85	19.3	.3	11
Virginia Supplemental Retirement System P.O. Box 6-C Richmond, VA 23214 804/786-8807	Robert H. Daniel Investment Officer	1,590.1 (bk.)	524.9 (bk.)		416.6 (bk.)
Washington State Finance Committee Room 314, Insurance Building Olympia, WA 98504 206/753-6810	John Hitchman Executive Secretary, Finance Committee	2,880	670		925
West Virginia Public Employees Retirement System Bldg. 5, Room 148, Capitol Complex Charleston, WV 25305 304/348-2031	Lewis N. McManus Executive Secretary	309.4			80.2
Wisconsin Investment Board 244 W. Washington Ave. Madison, WI 53702 608/266-2381	James M. LaFleur Executive Director	4,030.3	1,304.2		1,880.7
Wyoming Retirement System 3rd Floor, Barrett Bldg. Cheyenne, WY 82001 307/777-7270	Terry Hanley Director	241.8			102.6

BEST AVAILABLE COPY

Corporate bonds (in millions)	Mortgages (in millions)	Cash and short-term securities (in millions)	Other (in millions)	Reporting date	Investment advisers
$301	$	$25	$	3/31/80	First National Bank & Trust Company, Oklahoma City
481.4	360.2	15.6	89.0	12/31/79	Internal Administration/David L. Babson & Co.; Batterymarch Financial Management Corp.; Columbia Management; George D. Bjurman & Assoc.; BEA Associates, Inc.; Harris Associates, Inc., Quest Advisory Corp.; Claude Rosenberg; Fayez Sarofim & Co.; William D. Witter, Inc.
20		4	6	12/31/79	Fidelity Bank
2,628.0	613.2	240.4	273.5	6/30/79	Mellon Bank, N.A.; The Fidelity Bank
1,747.7	426.7	153.1		4/30/80	Mellon Bank; Alliance Capital Management Corp.; Fidelity Bank
125.4	12.3	58.1	2.1	6/30/79	Internal Administration
1,202			4	4/30/80	Jamison, Eaton & Wood, Inc.
1	7.5	31		3/31/80	Al A. Asher
464.0	8.1	77.6	92.7	3/31/80	Internal Administration
640		223		5/31/80	E. F. Hutton & Co.
1,439.9		43.5	5.1	5/31/80	Internal Administration/Duff and Phelps
352.4	22.2	112.5	23.3	4/30/80	Capital Consultants, Inc.; Eagle Management & Trust Co.; Smoot Knoche & Co.; Trust Co. of the West; Value Line Asset Management
26.8	7.5	6.8	13.3	6/30/79	Loomis, Sayles & Co.; Brundage, Story & Rose; Colonial Investment Advisors
445.8 (bk.)		130.7 (bk.)	72.1 (bk.)	4/30/80	Internal Administration/The Bank of New York; Batterymarch Financial Management; Massachusetts Financial Services Company; Putnam Advisory Company, Inc.
875	200	269	.1	12/31/79	Internal Administration/Batterymarch Financial Management Corp.; Columbia Management Co.; Eagle Management & Trust Co.; Loomis, Sayles & Co.; Pringle, Flinn, Elvins & Donahoe; Inc.; Torray and Clark
133.0	26.5	42.25	25.5	5/31/80	The Boston Company
(combined)	213.5	616.5	15.4	6/30/79	Internal Administration
129.7	9.5			12/31/79	Alliance Capital Management Corp.

BEST AVAILABLE COPY

NOTE

This Microfiche meets the quality requirements of the American National Standard for Microfiche of Documents (ANSI PH5.9-1975). However, because of imperfections in the document from which it was made, it contains images that are illegible or difficult to read. Although better copy could not be obtained prior to filming, the Microfiche will be replaced should better copy later become available.

Congressional Information Service, Inc.
Washington, D.C.

CIS

NOTE

ONLY THE FOLLOWING PAGES OF THIS PUBLICATION

HAVE BEEN FILMED

Cover 1, p. 2,

14, 16, 18, 20,

70, 72-78, 104,

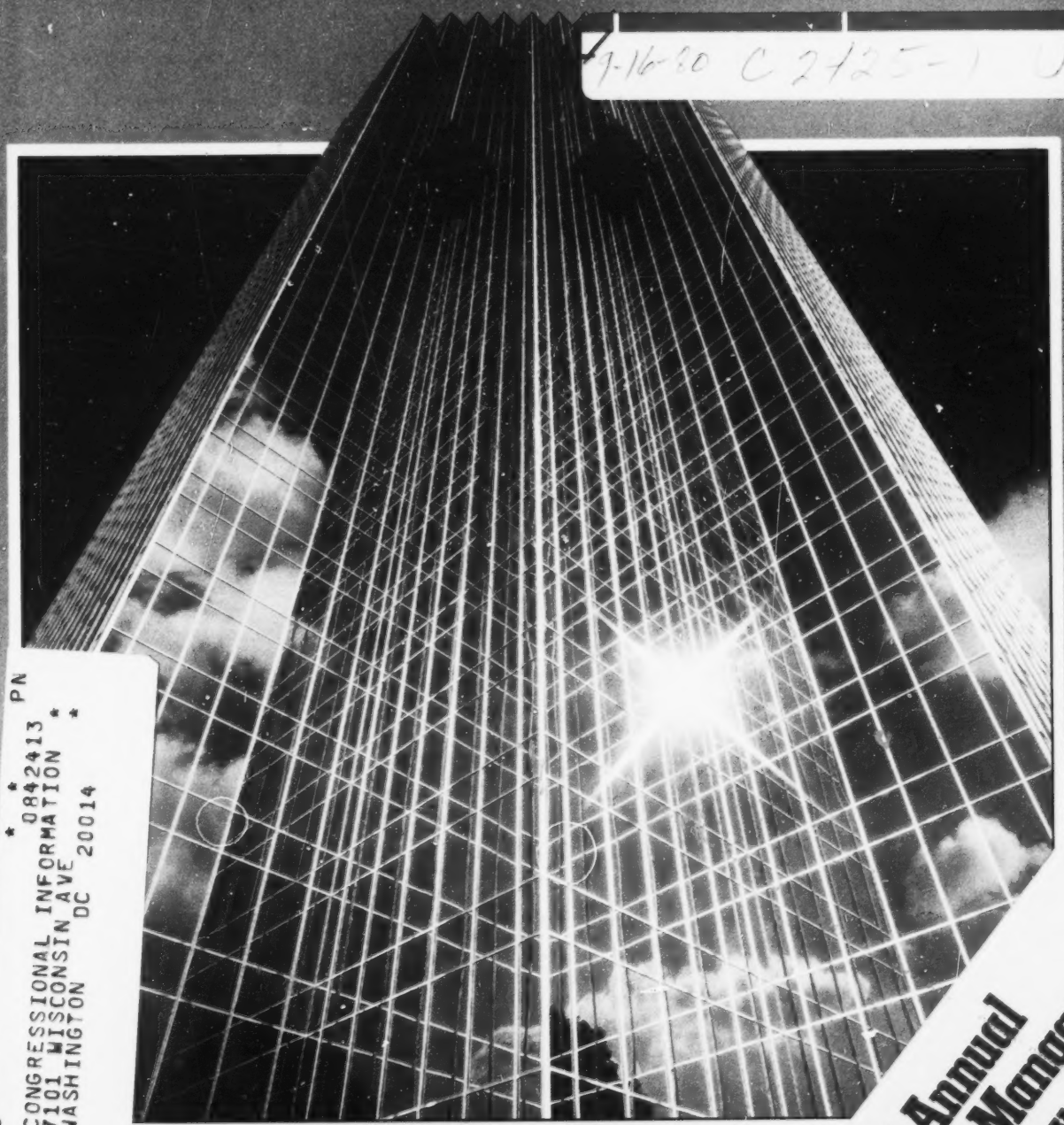
87-97.

SEPTEMBER 1980

Pension World

The Magazine for Plan Sponsors / A Publication of Communication Channels, Inc.

7-16-80 C 2725-1 U



0 PN
* * 0842413 * *
CONGRESSIONAL INFORMATION
7101 WISCONSIN AVE
WASHINGTON DC 20014

DuPont's $4,100,000,000 Pension Fund Chemistry

Survey: Pension Fund Real Estate Investing

Using Leverage in Real Estate Investment

Third Annual Real Estate Manager Directory

September 1980

Pension World

Volume 16 Number 9

The Magazine for Plan Sponsors / *A Publication of Communication Channels, Inc.*

Joseph Shore
President
Cyril Lee Ellison
Publisher
Diana H. P. Roberts
Editor
Marie Powers
Assistant Editor
Steven E. Schanes
Editorial Consultant
Charles E. Lloyd
Advertising Director
Martin Greene, Production Director
Fran Rappaport, Production Mgr.
Brian Buxton, Art Director
Elmer Dalton, Circulation Director
Joan Robinson, Circulation Mgr.

Contributing Editors

Ronald Derven **Noel Arnold Levin**
Morris Stone **Ernest Quickel**
Robert A. Levy

Editorial Advisory Board

Clayton A. Boggan, Jr.
Wachovia Bank & Trust Company
Eugene B. Burroughs
International Brotherhood of Teamsters
Ernest J. E. Griffes
Levi Strauss & Company
Fred Halperin
Coldwell Banker R.E. Mgmt. Services
Michael F. Klein, Jr.
Price Waterhouse & Company
Jack H. Leylegian II
Bank of America NT&SA
Ray L. Lillywhite
Alliance Capital Management
Matthew M. Lind
Travelers Insurance Companies
Malcolm D. MacKinnon
Prudential Insurance Company
Jeffrey D. Mamorsky
Vedder, Price, Kaufman, Kammholz & Day
Judith F. Mazo
Martin E. Segal Company
Paul T. Shuitz
Towers, Perrin, Forster & Crosby
Michael N. Thome
Calif. Teachers' Retirement System
Kenneth W. Tolo
University of Texas
Anthony Wilson
Continental Ill. National Bank

FEATURES

12 **Using the other fellow's money** **by John S. Lillard**
To leverage or not to leverage real estate.

14 **Survey of Real Estate Investing by Pension Fund Administrators**
Money Market Directory's latest figures on plan sponsor interest in real estate.

22 **How reasonable are your manager's valuation techniques?** **by Vincent F. Martin, Jr.**
Understanding real estate valuation techniques.

32 **Investment insights for an inefficient market** **by Stephen E. Roulac**
Differences between real estate and corporate securities.

40 **An understandable relationship** **by M. Thomas Lardner**
Why European pension funds are so interested in American real estate.

45 **Optimizing your property management agent** **by Eamonn Collopy**
Strategies for selecting and utilizing a manager.

48 **The chemistry of DuPont's $4.1 billion pension fund** **by Ronald Derven**
How an in-house staff maneuvers through today's murky waters.

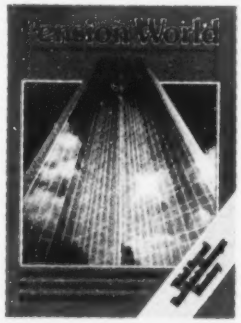
64 **Retirement policy in a changing environment** **by Lawrence T. Brennan**
Maintaining a consistent policy despite changing ground rules.

70 **Portfolio risk reduction through foreign stock** **by Albert J. Fredman and Radha M. Sharma**
Diversifying into foreign vehicles to maximize returns.

87 **3rd Annual Real Estate Manager Directory for Plan Sponsors**
Pension World's exclusive listing of real estate managers currently handling pension funds, their fees, types of participation, returns on investment, etc.

DEPARTMENTS

4 Letters to the Editor
5 International Pension World
8 Washington Newsletter
55 Pension News
59 Pension People
62 Meetings and Conventions
79 What Every Fiduciary Should Know
107 Arbitration Awards



Cover: A mutual interest between pension funds and real estate seems to be growing. *PW*'s real estate stories begin on page 12.

BPA

Cover photo: Tower Place, Atlanta, Ga. Photography by E. Alan McGee. Courtesy of Stevens & Wilkinson Architects Engineers Planners Inc. Used by permission.

Pension World is published monthly by Communication Channels, Inc., Joseph Shore, President; B.J. Kotsher, Executive Vice President, Betty Dornbush, Treasurer. Editorial and advertising offices at 6285 Barfield Road, Atlanta, GA 30328. Telephone (404) 256-9800. Pension World is a registered trademark of Communication Channels, Inc. © 1980 by Communication Channels, Inc. Controlled circulation postage paid at Shepherdsville, KY (USPS 502-110) and Atlanta, GA (USPS 410-030). Subscription rates: U.S.A., 1 year, $34; 2 years, $59; Canada and Mexico, 1 year, $36; Foreign, 1 year, $42. Single copies, $3.00. The opinions expressed by authors and contributors to Pension World are not necessarily those of the editors or publisher. Articles appearing in Pension World may not be reproduced in whole or in part without the express permission of the publisher. Microfilm copies of Pension World are available from University Microfilms, 300 North Zeeb Road, Ann Arbor, MI 48106. Postmaster: Please send form 3579 to Circulation Department, Pension World, 6285 Barfield Road, Atlanta, GA 30328.

Survey of Real Estate Investing by Pension Fund Administrators

During June 1980, *Money Market Directories, Inc.*, distributed real estate questionnaires to the senior investment officers of the 1,000 largest corporate pension funds — all of which are funds with more than $23 million in total assets. Two hundred forty-nine completed questionnaires were returned, for a response rate of 24.9 percent. All further references to percentages are based upon this total response universe of 249 sponsors, both in the text of this article and in the following statistics, unless otherwise indicated.

Thirty-eight percent of the respondents currently own real estate equities, and each owns an average of $24.4 million. This real estate ownership amounts to $2.28 billion total and represents 4.13 percent of the respondents' total assets of $55 billion. The 4.13 percent figure of real estate ownership as a percent of total portfolio assets is close to previous industry estimates of between three and four percent.

A more significant aspect of pension funds and their involvement with real estate is what they intend to do in the future. We have made a distinction here between two types of real estate participation: direct ownership of real estate equities and participation in a common trust fund.

One hundred twenty-two of our respondents intend to invest $1.708 billion in real estate equities during the next three years. This is an average of $14 million per fund and is primarily directed to the purchase of income-producing property utilizing either a bank, insurance company, or real estate firm to manage the property.

One hundred five of the respondents will purchase commingled funds during the next three years, and their investment will be $1.466 billion in new commitments. The average investment per fund is $14 million, which will go primarily to insurance company funds and bank-sponsored funds. Significantly less interest is shown in other sponsors of common trust funds.

Most readers of articles devoted to pension fund investment in real estate are particularly interested in the total anticipated real estate investment by pension funds in the near future. We will not disappoint you but will limit our predictions to the actions of the largest 1,000 corporate pension funds.

Our 25 percent response rate from 1,000 corporate pension funds represents an excellent sample. Over half the returns were *not* inclined to invest in real estate during the next three years, which suggests that we received an equal proportion of answers from both sponsors who were interested in our questions and those who were not, due to their lack of interest in real estate. Therefore, we believe our sample to be representative of all the largest corporate pension funds' intentions and will multiply our actual results by a factor of four to arrive at our estimate.

Our study projects that pension funds will commit an additional $12.7 billion to new real estate investments over the next three years, divided almost equally between the direct ownership of real estate equities and participation in commingled common trust funds sponsored by institutional managers. We should note that these 1,000 largest corporate pension funds had $221 billion in total assets collectively as of December 1979, which represented 83 percent of the total corporate pension assets in the United States.

The following are actual tabulations from the 249 respondents. We have compared this year's responses to our previous surveys whenever possible. It should be noted that whenever percentages add to more than 100 percent, it is due to multiple answers.

The information contained in this survey has been researched, edited and copyrighted by Money Market Directories, Inc., publishers of the Money Market Directory, *the encyclopedia of pension funds with assets over $2 million and their investment advisers. Included in Money Market Directories' data base is real estate ownership by all major U.S. pension funds. For further information, contact David Bowerman, vice president, 818 East High St. Charlottesville, Va. 22901, (800) 446-2810.*

Do you regard real estate investment as an effective inflation hedge?

	1975	1976	1977	1980
Yes	80%	62%	67%	86%
No	15%	36%	29%	8%
Did not answer	5%	2%	4%	6%

Do you regard real estate investments as being capable of contributing consistency to your fund's performance?

	1975	1976	1977	1980
Yes	71%	59%	59%	77%
No	23%	39%	37%	18%
Did not answer	6%	2%	4%	5%

What would you regard as the minimum acceptable net cash yield to the fund from real estate equity investments?

	1975	1976	1977	1980
Specified a minimum of 7%	5%	17%	21%	11%
Specified a minimum of 8%	20%	15%	18%	13%
Specified a minimum of 9%	22%	15%	17%	14%
Specified a minimum of 10%	17%	21%	17%	17%
Specified a minimum in excess of 10%	13%	13%	9%	21%
Did not answer	23%	19%	18%	24%

What would be your minimum expectation for annual appreciation from real estate equity investments?

	1975	1976	1977	1980
Expected annual appreciation of less than 2%	4%	1%	4%	—
Identified 2% appreciation as the minimum acceptable rate	23%	12%	9%	3%
Identified 3% appreciation as the minimum acceptable rate	26%	18%	12%	4%
Identified 4% appreciation as the minimum acceptable rate	16%	9%	6%	6%
Identified 4+% appreciation as the minimum acceptable rate	17%	37%	48%	66%
Identified 5% appreciation as the minimum acceptable rate	—	—	—	17%
Identified 6% appreciation as the minimum acceptable rate	—	—	—	10%
Did not answer	14%	23%	21%	21%

Has your fund given consideration to participation in direct real estate investment utilizing the management expertise of an outside real estate counselor?

	1975	1976	1977	1980
Yes	29%	18%	22%	33%
No	66%	74%	66%	60%
Did not answer	5%	8%	12%	7%

If yes, what type of organization?

A. 13% insurance company
B. 10% bank
C. 4% investment banker
D. 3% developer
F. 12% independent real estate management firm
G. 3% broker or realtor
H. 66% NA

What do you regard as an acceptable management fee for your fund's participation in direct real estate investment utilizing an outside real estate investment counsel?

	1975	1976	1977	1980
½ of 1% annually of real estate under management	19%	22%	39%	—
¾ of 1% annually of real estate under management	9%	13%	7%	29%
1% annually of real estate under management	9%	17%	13%	30%
1¼% annually of real estate under management	—	—	—	5%
1½% annually of real estate under management	6%	3%	1%	8%
2% annually of real estate under management	1%	1%	0%	1%
Did not answer	56%	44%	40%	26%

Which of the following stages in the real estate investing cycle do you consider the most and least attractive? (Indicate M or L)

	M	L			M	L	
A.	(8)	(47)	% raw land	D.	(7)	(25)	% property management
B.	(14)	(15)	% development	E.	(4)	(12)	% sale
C.	(67)	(1)	% purchase of income property				

How do you value the real estate in your portfolio?

	1977	1980
At cost	33%	17%
By replacement cost	5%	10%
By income appraisal-capitalizing the value of the income flow	16%	30%
Comparable property sale	—	31%
All of the above	—	22%
Did not answer	46%	—

Do you believe that the tax-exempt pension trust is able to compete efficiently with the tax-sheltered or private investor in the purchase of real estate between the range of $1 million and $5 million?

1977		1980	
Yes 35%	No 39%	Yes 56%	No 30%

Between the range of $5 million and $10 million?

1977		1980	
Yes 45%	No 24%	Yes 68%	No 16%

Does the type of real estate investments affect this decision?

1977		1980	
Yes 41%	No 24%	Yes 60%	No 21%

In view of ERISA's provisions that fiduciaries can be held personally liable for the investment decisions made for their fund, what effect, if any, would this have on your real estate investment policy?

	1976	1977	1980
No effect on real estate investment policy	35%	37%	31%
Little effect	20%	17%	24%
More conservative approach to real estate investment policy	22%	25%	27%
Would not make real estate investments	6%	10%	7%
More liberal approach to real estate investment policy	1%	0%	0%
Other	2%	2%	2%
Did not answer	14%	9%	9%

In view of ERISA's provisions concerning the diversification of portfolios, what effect, if any, would this have on your real estate investment policy?

	1976	1977	1980
No effect on real estate investment policy	39%	39%	32%
Little effect	25%	23%	29%
More conservative approach to real estate investment policy	10%	11%	18%
Would not make real estate investments	4%	8%	5%
More liberal approach to real estate investment policy	7%	6%	8%
Other	2%	5%	2%
Did not answer	13%	8%	10%

As a participant in real estate pool-type vehicles, would your fund be more inclined to:

	1975	1976	1977	1980
Concentrate your participation in one vehicle	32%	30%	43%	25%
Distribute participation in two or more vehicles	68%	70%	57%	45%
Did not answer	—	—	—	30%

What do you regard as an acceptable management fee for your fund's participation in institutionally sponsored pool-type real estate vehicles?

	1975	1976	1977	1980
½ of 1% annually of real estate under management	26%	30%	29%	—
¾ of 1% annually of real estate under management	15%	16%	8%	35%
1% annually of real estate under management	26%	15%	16%	24%
1¼% annually of real estate under management	—	—	—	5%
1½% annually of real estate under management	9%	1%	1%	2%
2% annually of real estate under management	1%	0%	1%	0%
Did not answer	23%	38%	45%	71%

Does your fund intend to purchase new real estate investments during the next three years?

	1976		1977		1980	
	Number	Percent	Number	Percent	Number	Percent
Yes	48	29%	52	29%	—	—
Yes — direct ownership	—	—	—	—	122	49%
Yes — commingled	—	—	—	—	105	42%
No	96	58%	96	53%	—	—
No — direct ownership	—	—	—	—	127	51%
No — commingled	—	—	—	—	144	58%

The method of participation for these funds is:

	Number	Percent	Number	Percent	Number	Percent
Mortgages	9	19%	14	27%	NA	NA
Direct ownership						
Direct purchase	15	31%	19	37%	59	48%
General partnership	0	0%	0	0%	39	32%
Limited partnership	3	6%	3	6%	18	15%
Corporations	0	0%	4	8%	21	17%
Commingled ownership						
Bank commingled	19	40%	18	35%	43	41%
Insurance commingled	23	48%	29	56%	57	54%
Other Common Trust Funds	2	4%	4	8%	13	12%
REITs	4	8%	2	4%	NA	NA
Others	1	2%	0	0%	NA	NA

Portfolio risk reduction through foreign stock

by Albert J. Fredman and Radha M. Sharma

Diversification, i.e., spreading the risks, is an important maxium of prudent investment management that has been practiced on a domestic level for years. The rule of thumb is that at least ten to fifteen different common stocks — preferably representing a variety of companies in different industries with different economic characteristics — are needed to eliminate most of the company-specific risk. This leaves the portfolio manager with market-related risk, or beta, which cannot be diversified away — at least not with a portfolio consisting exclusively of domestic equities. This market-related risk is a big risk today since the stock markets of the U.S. have been especially volatile during the past decade or so.

Albert J. Fredman is professor of finance and Radha M. Sharma is associate professor of finance in the School of Business Administration and Economics at California State University, Fullerton.

International diversification

Investing in a wide variety of foreign as well as domestic common stocks is an effective means of significantly lowering the market-related risk of a stock portfolio. Certain investors, such as European institutions that are worried about high rates of inflation at home, have done this for years. For medium-sized and large portfolios of securities, international diversification is in the interest of prudent money management; the risk of the domestic market can be averaged with the risks of other markets. Individual foreign economies can differ favorably or unfavorably from our economy in terms of their personal savings rate, resource self-sufficiency, private capital investment, real GNP growth, etc. Therefore, foreign stock markets, as a group, are not expected to move in unison, since each foreign economy moves in its own growth cycle.

The world's stock markets are somewhat independent. Thus, a portfolio of stocks that is well-diversified across countries is protected from the risks inherent in any one of the countries. The risk (volatility) of such a portfolio will be less and/or the return will be

EXHIBIT I

Total Returns from Major Stock Markets, 1970-1979

Country	Percentage return (capital plus dividend) in each year										Compound %p.a.	
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	70-79	74-79
FAR EAST												
Australia	-19.1	-7.7	+20.2	-12.2	-32.0	+47.1	-10.3	+10.8	+20.4	+41.5	+5.7	+20.0
Hong Kong	+42.4	+75.8	+150.5	-40.6	-56.7	+108.4	+43.2	-4.1	+23.9	+79.2	+24.5	+44.8
Japan	-11.4	+33.5	+123.4	-20.1	-15.6	+19.0	+24.8	+15.2	+52.0	-11.9	+18.5	+18.1
Singapore	—	+56.1	+128.5	-28.7	-35.8	+50.0	+12.2	+12.6	+47.5	+29.0	+21.7	+29.2
N. AMERICA												
Canada	-3.2	+7.1	+25.6	-1.4	-26.1	+14.0	+18.8	-2.4	+19.2	+49.5	+8.7	+16.6
U.S.A.	+0.4	+15.3	+17.1	-17.1	-27.5	+35.6	+23.3	-7.7	+6.1	+14.4	+4.7	+13.4
EUROPE												
Austria	+10.7	-1.2	+36.1	+23.4	+14.2	-3.1	+14.9	+5.3	+14.7	+18.5	+13.1	+9.8
Belgium	+6.0	+9.4	+30.9	+14.2	-13.8	+12.8	+8.6	+9.8	+28.8	+14.8	+12.1	+14.7
Denmark	-6.9	+2.8	+106.9	+4.7	-10.9	+22.1	+6.2	+1.6	+8.2	-2.9	+11.9	+6.7
France	-6.6	-6.1	+23.4	+3.2	-22.0	+41.9	-19.8	+4.8	+68.3	+26.5	+10.1	+20.5
W. Germany	-23.4	+10.4	+17.5	-4.8	+15.9	+28.4	+6.1	+24.3	+25.2	-4.4	+12.7	+15.2
Italy	-17.4	-16.2	+14.0	+9.7	-33.1	-8.8	+26.2	-18.5	+44.3	+16.8	-4.7	-1.6
Netherlands	-6.8	-3.6	+27.7	-5.3	-15.4	+46.0	+15.2	+14.6	+18.6	+17.8	+11.5	+21.9
Norway	+32.9	+10.6	+8.4	+126.4	-39.3	-14.9	+14.1	-22.7	+5.4	+176.8	+15.3	+17.0
Spain	-4.0	+17.8	+39.5	+24.3	-8.7	-0.4	-35.2	-32.6	+6.0	+3.7	-1.3	-13.8
Sweden	-18.8	+26.8	+15.8	+2.3	+10.7	+19.7	+5.5	-20.2	+22.2	+1.8	+8.4	+4.4
Switzerland	-13.2	+14.9	+27.8	-4.0	-12.5	+39.6	+9.9	+27.8	+20.8	+11.6	+14.0	+21.4
U.K.	-6.1	+37.4	+3.4	-25.5	-47.7	+109.5	-11.7	+55.5	+14.1	+21.3	+9.2	+31.8
WORLD	-2.4	+16.0	+22.1	-14.3	-23.6	+32.9	+13.9	+1.8	+17.2	+11.8	+7.2	+15.1

All figures shown in U.S. $ terms; capital plus dividends.
Source: Capital International, Geneva.
Reprinted with the permission of G. T. Management (Asia) Ltd.

Japan has comprehensive securities laws which, in many respects, are similar to our federal securities laws.

greater than that of a portfolio of securities selected from only one country. A portfolio that is well-diversified in different foreign countries may be expected to have only about 50 percent of the risk, or variability of returns, as a well-diversified portfolio consisting of an equivalent number of U.S. stocks.[1]

That the world's stock markets exhibit at least some degree of independence can be seen in the data in Exhibit I. The total rate of return including dividends for each of the world's principal stock markets during the 1970's is shown in U.S. dollars. The lack of positive correlation among the rates of return between certain pairs of different stock markets during certain periods is evident from an examination of these data. For instance, in 1970, the return from the Hong Kong market was +42.4 percent, whereas the return from the West German market was -23.4 percent. Over the 1974-79 period, the return from the Hong Kong market, a spectacular performer during the 1970's, was +44.8 percent, whereas the 1974-79 return from Spain's stock market was -13.8 percent.

Foreign investment holds a number of attractions in addition to the potential of reducing market-related risk. For instance, in the period since World War II, certain foreign economies have grown more rapidly than ours, and their stock markets have outperformed ours as well. Further, the securities markets of many countries are exhibiting significant growth in size and liquidity. For instance, Japan has eight stock exchanges, and the Tokyo Stock Exchange is the second largest in the world (after the New York Stock Exchange) in terms of the value of shares traded. And Japan has comprehensive securities laws which, in many respects, are similar to our federal securities laws.

[1]Bruno H. Solnik, "Why Not Diversify Internationally Rather Than Domestically?" *Financial Analysts Journal*, July-August 1974, pp. 48-54.

There may be less publicly available information on foreign companies than U.S. citizens are accustomed to seeing on domestic companies.

Risks of foreign investment

In addition to the usual kinds of risks one faces when investing in domestic securities, several additional risks and potential problems are brought into the picture when investing overseas.

Political Risk. Political risk exists more with certain foreign countries than with others. Expropriation or confiscatory taxation, political or social instability, or diplomatic developments can affect U.S. investors holding foreign securities. For instance, U.S. citizens have experienced the nationalization and expropriation of foreign companies in which they held stock. And, certain foreign governments, such as Cuba, have defaulted on their bonds.

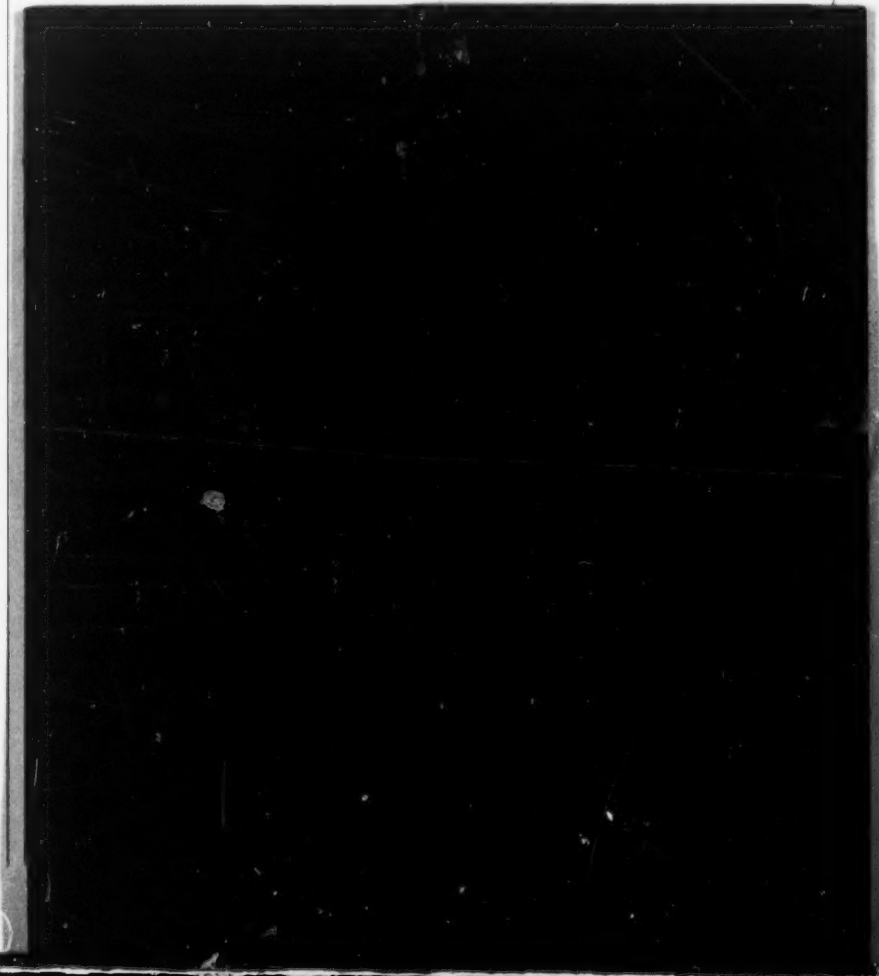
Exchange Rate Risk. Since 1971, the world has been on a system of managed floating exchange rates. The rate at which the U.S. dollar can be exchanged for another country's currency "floats" (fluctuates), based upon the demand and supply conditions for the respective currencies. The investor who holds securities denominated in a particular country's currency runs the risk of loss if that country's currency declines in value in relation to the U.S. dollar during the period the investment is held. Over a recent six-year period, the Australian stock market rose 2.1 percent in Australian dollars, but declined 19.4 percent in terms of U.S. dollars. On the other hand, if the foreign currency rises in value relative to the U.S. dollar, the investor will gain. During this same six-year period, the German market, which rose just 1.6 percent in deutschmarks, advanced 52.6 percent in U.S. dollar terms because of the large increase in the strength of Germany's currency relative to ours.

Other Investment Problems. Since foreign companies are not generally subject to uniform accounting standards, there may be less publicly available information on them than U.S. citizens are accustomed to seeing on domestic companies. While growing in trading volume, foreign stock markets generally have less volume than the NYSE, and the stocks of some foreign companies are less liquid and more volatile than those of comparable domestic companies. These characteristics may also exist in certain foreign bond markets.

Fixed commissions, which exist on foreign stock exchanges, are generally higher than our negotiated commission rates. Less governmental regulation and supervision of stock exchanges, brokers and listed companies generally exists abroad than in the U.S. Myriads of different foreign securities exist, and it is often difficult to select a good foreign stock. Finally, there are difficulties of communication as well as the technical problems of executing a securities transaction in a distant foreign market.

Reducing risks

The risks of investing abroad can be reduced to some degree by including in the portfolio the securities of a variety of companies selected from a number of different countries which exhibit different



The most important requirement for effective international diversification is to have a sufficient number of different countries, with a variety of economic characteristics, represented in the portfolio.

EXHIBIT II

Geographic Distribution of Assets of Multi-Country Funds

Investment Company	Asset Distribution by Country			
G. T. Pacific Fund	Japan	64.6%	Hong Kong	5.6%
	Australia	13.3%		
Keystone International Fund	United States	44.0%	Switzerland	2.0%
	Canada	7.0%	Australia	1.0%
	United Kingdom	6.8%	Belgium	1.0%
	Japan	6.0%	France	1.0%
	Germany	5.0%	Hong Kong	1.0%
	Mexico	2.0%	Netherlands	1.0%
			Singapore	1.0%
New Perspective Fund	United States	66.3%	United Kingdom	1.8%
	Canada	6.1%	Netherlands	1.7%
	Japan	4.6%	Germany	1.0%
	Australia	2.4%	Singapore	0.9%
	France	1.8%	Hong Kong	0.8%
			Other Non-U.S.	0.4%
Putnam International Equities Fund	United States	29.5%	South Africa	4.8%
	Japan	23.0%	United Kingdom	4.8%
	Germany	8.2%	Holland	4.7%
	Australia	6.6%	Hong Kong	3.7%
			Switzerland	2.7%
Rowe Price International Fund	Japan	40.0%	France	5.0%
	United Kingdom	20.0%	Netherlands	5.0%
	Germany	15.0%	Singapore and Malaysia	5.0%
	Australia	5.0%	Switzerland	5.0%
Scudder International Fund	Europe	22.0%	South Africa	13.0%
	Japan	21.0%	Hong Kong	4.0%
	Australia	20.0%	Singapore	4.0%
	Canada	13.0%	Mexico	3.0%
Templeton Growth Fund Ltd.	United States	59.8%	Australia	3.0%
	Canada	20.1%	South Africa	0.4%
	Japan	4.9%	United Kingdom	0.4%
	Netherlands	3.6%	Hong Kong	0.1%
Templeton World Fund	United States	63.6%	Japan	4.0%
	Canada	12.0%	Holland	3.1%
	Australia	4.6%	United Kingdom	0.3%
			Mexico	0.1%

The investment percentages appearing in this table are general indications and should not be taken as necessarily current portfolio breakdowns, since the proportions may change considerably over time. Percentages for individual funds do not add to 100 percent in those instances where short-term reserves are not included.

economic characteristics. For example, in the illustration above, a U.S. investor who held Australian securities would have lost money on his holdings, whereas the one who held German securities would have gained. By holding securities of both German and Australian companies over this period, the exchange rate loss on the Australian securities would be averaged with the exchange rate gain on the German holdings.

Thus, exchange rate fluctuations will present less of a risk when the securities of companies located in a

variety of countries are held. The same logic applies to political risk and to the economic prosperity (or lack of it) of the country and its businesses. The most important requirement for effective international diversification is to have a sufficient number of different countries, with a variety of economic characteristics, represented in the portfolio. The same reasoning has applied in a somewhat different way to domestic investment, since prudent money managers generally opt to invest in the stocks of companies chosen from a variety of industries with different characteristics.

Investing through investment companies that hold portfolios of the securities of companies representing one or more different foreign countries can be a practical and effective way of lessening the risks and problems inherent in foreign investment. These foreign funds would not represent a total investment program, of course, but could be an important supplement to an existing portfolio of stateside securities.

International funds

Several types of investment companies are available to the overseas investor: 1) funds that specialize in investments in one specific country only, 2) funds that invest in different foreign countries, 3) funds that invest in United States securities — which may account for one-half or more of their assets — and in the securities of companies in different foreign countries, and 4) funds that invest primarily in gold mining stocks of South African companies. This article will focus on the first three types of funds.

Investment in one foreign country

Japan Fund and Nomura Index Fund of Japan invest exclusively in

After the U.S., Japan is the second-largest free world economy.

Japanese securities. The Convertible Fund of Japan invests in convertible bonds of Japanese firms. After the U.S., Japan is the second-largest free world economy. Canadian Fund, which seeks long-term capital growth, provides a medium for diversified investment in Canada.

Nomura Index Fund, which was started in 1978, is the first index mutual fund to invest in foreign securities. The total net assets of the fund were just under $3 million at this writing. The fund is an open-end, no-load fund that holds the Nomura 185 Index, which consists of the largest 185 common stocks (based on total market value of outstanding shares) listed on the First Section of the Tokyo Stock Exchange. The First Section of the TSE is comprised of over 900 large, well-seasoned companies as opposed to the some 500 smaller, more speculative companies traded on the Second Section. The 185 Index is thought to be broadly representative of the Japanese stock market as a whole. The objective of an index fund is to mirror the performance of a particular market, not to outperform the market. The minimum initial purchase for the fund is $250,000, and subsequent investments must be in increments of $100,000. Because the fund follows a buy-and-hold strategy, it has a low expense ratio and a low portfolio turnover. The redemption fee is determined by the length of time the shares have been held.

The Japan Fund, a closed-end investment company, started operations in 1962. Because it is closed-end, it often sells at a discount from its net asset value. This discount, if wide by historical standards, can make the fund more attractive yield-wise. For instance, if the fund is selling at a 25 percent discount from its net asset value, the investor will have one dollar's worth of assets for each 75 cents invested. The discount on many closed-end funds can more than offset the annual expenses of running the fund, which are charged to the investor and indicated by the fund's expense ratio.

The basic problem of the global investor is how to invest in the securities of companies in a variety of countries so as to realize the maximum risk reduction in the overall portfolio. A portfolio of

Ten or 12 countries should be represented in a portfolio to achieve full benefit of international diversification.

U.S. and Japanese stocks, for example, while having some degree of international diversification and being less risky than a portfolio consisting entirely of U.S. stocks, will not be diversified enough for a substantial reduction of risk. Ten or 12 countries should be represented in the portfolio to achieve full benefit of international diversification. These countries should exhibit different characteristics and preferably be in different stages of development, since the developing countries that are beyond their take-off stage have the greatest long-term growth potential.

Investment in several foreign countries

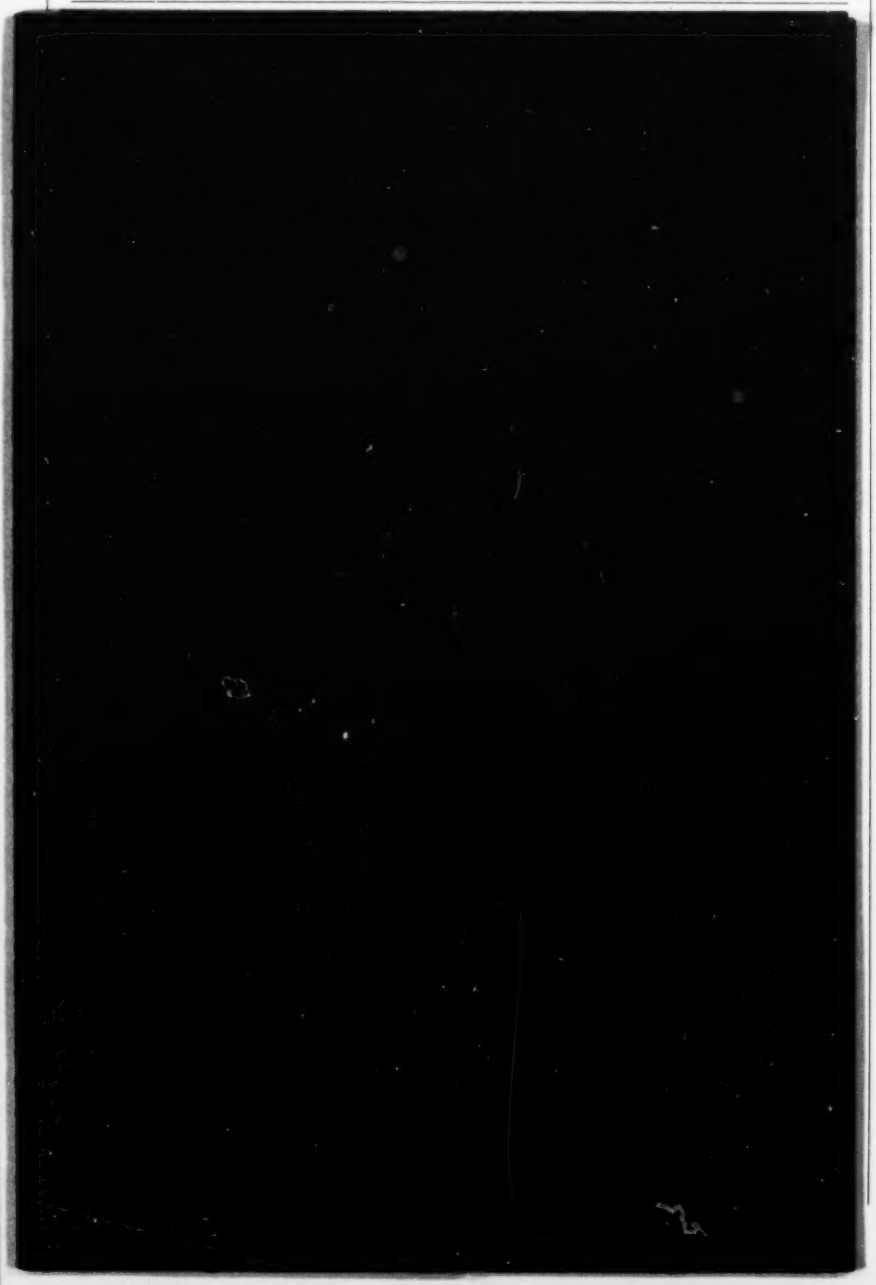
G. T. Pacific Fund, a small no-load fund started in 1977, specializes in far eastern countries. Headquartered in San Francisco, the fund initially invested exclusively in Japanese securities. But, as of March 1980, the fund can also invest in the securities of other far eastern countries, namely Hong Kong, Singapore, Malaysia, the Philippines, Australia and New Zealand. Japanese securities still constitute the majority of its present holdings.

In July 1980, the shareholders of the Nomura Capital Fund of Japan, which invested exclusively in Japanese securities, voted to have Merrill Lynch take a lead role in expanding the investment territory of the fund to include the securities of companies located throughout Asia and Australia. The reasoning behind this broader investment territory is that some of the countries outside Japan are at an earlier stage in their economic development and, hence, afford the possibility of greater growth potential. This move is intended to stimulate stronger investor interest in the fund; the assets of the Nomura Capital Fund had declined from about $30 million at its inception in 1976 to some $11 million recently. The new manager of the fund, now named Merrill Lynch Pacific Fund, is Merrill Lynch-Nomura Management Co. (At this writing, it was too soon to obtain meaningful data on the geographic distribution of the new fund's assets.)

Scudder International Fund, a no-load fund, invests in a wide variety of countries. The fund in-

The far eastern markets have generally yielded the highest rates of return over the past five years as well as the past ten years.

tends to have represented in the portfolio, in substantial proportions, business activities in no fewer than three different countries. It invests exclusively in foreign securities. Currently, the fund's portfolio emphasizes holdings in countries rich in energy resources and in far eastern countries where economies are expected to enjoy relatively high growth rates. As seen in Exhibit I, the far eastern markets have generally yielded the highest rates of return over the past five years as well as the past ten years.



The Rowe Price International Fund is a no-load, balanced fund which requires a $25,000 minimum initial investment. Designed mainly for institutional investors, it commenced operations in May 1980. The fund invests primarily in the common stocks of established companies located in developed, as well as developing, countries. Further, it diversifies its investments broadly among countries and intends normally to have businesses in at least three different countries represented in its portfolio. Presently, the assets of the fund are invested in Europe and the Far East.

Investment in the U.S. and foreign countries

One fund that invests in U.S. and foreign securities is the New Perspective Fund of the American Funds Group. A large fund, it invests chiefly in the stocks of U.S. companies; however, it can invest up to 40 percent of its assets in foreign securities. The Putnam International Equities Fund recently had some 30 percent of its assets invested in stateside securities, with the balance invested in eight different foreign countries. Up to 70 percent of the fund's assets may be invested in foreign securities. Keystone International Fund also invests in a variety of countries (12 foreign countries are represented in its portfolio, according to a recent report) but some 44 percent of its assets are presently in U.S. securities. However, it can invest up to 100 percent of its assets abroad, as it has no country limits.

Nearly 60 percent of the assets of the Templeton Growth Fund Limited portfolio is now invested in U.S. securities. This fund was started in 1954. John Templeton changes the amounts invested in

(Continued on page 104)

A number of foreign-stock funds are available to the portfolio manager who desires a simple, effective, and economical vehicle for international diversification.

Portfolio risk reduction through foreign stock

(Continued from page 78)

different countries in accordance with his estimates of the prospects of the individual companies and economies.

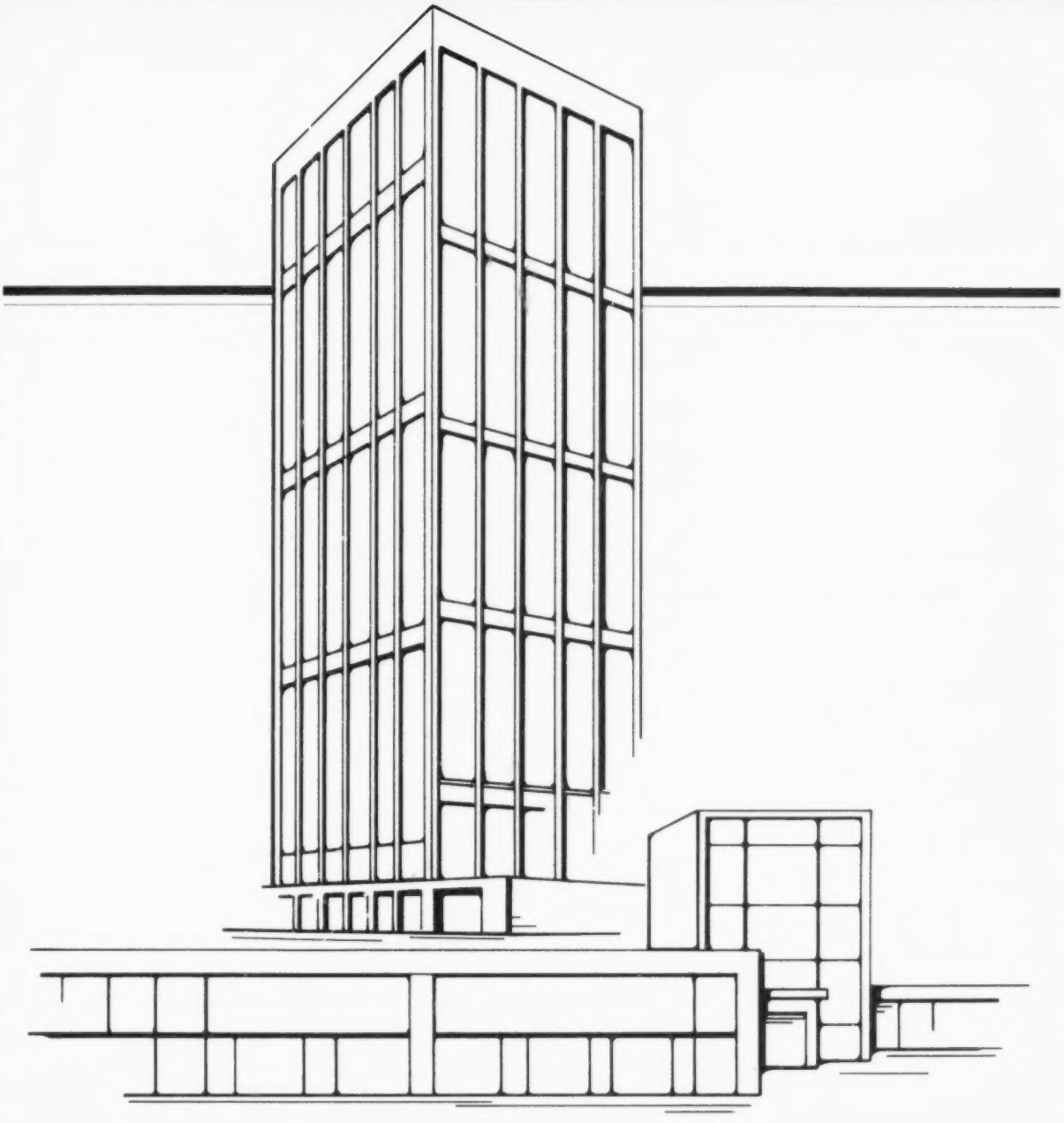
For instance, at one time, Japanese stocks accounted for the majority of the fund's assets. Currently, he feels that U.S. securities are the best buy. The much newer Templeton World Fund, begun in January 1978, also has over 60 percent of its assets now invested in U.S. securities. Like the Keystone International Fund, the Templeton funds face no country limits and can commit up to 100 percent of their assets abroad. Templeton trys to avoid countries which have socialism and high rates of inflation.

Funds that invest in stateside as well as foreign securities may not be as desirable for purposes of international diversification for an institution that already has an adequate amount of U.S. holdings in the form of individual stocks and/or investment companies. These funds would appeal to those seeking a lesser degree of international diversification. Or, they may be attractive to investors looking for a complete portfolio in one investment company. An investor can obtain the optimum international portfolio mix by selecting a fund that consists of, in the minds of the fund managers, the optimal proportions of U.S. securities and the optimum amounts invested in the various foreign countries.

Conclusions and recommendations

A number of foreign-stock funds are available to the portfolio manager who desires a simple, effective, and economical vehicle for international diversification. The investor will want to consider past data on the fund's expense ratio, portfolio turnover, portfolio composition, and performance, among other things.

More funds that invest virtually all of their assets in the securities of one or a number of foreign countries are needed to offer investors (who already hold a portfolio of U.S. securities) an opportunity to achieve truly effective international diversification with its desirable reduction in overall portfolio risk and/or increase in return. These funds should preferably be of the no-load variety without excessive expense ratios and portfolio turnover. A lower portfolio turnover means lower transaction costs to be passed on to the fund's shareholders. □



3rd Annual Real Estate Manager Directory

■ The following *Pension World* Real Estate Manager Directory lists firms who are managing real estate investment portfolios for pension funds. It is not an exhaustive list, but rather lists the firms who responded to *Pension World*'s questionnaire and who fit the prescribed criteria.

Only those respondents who indicated they are already providing real estate investment for pension funds are listed. No company is listed whose total assets under real estate management were less than $10 million.

Name and address	Person to contact, phone	Total assets under real estate management ($ millions)	Number of tax-exempt real estate clients	Total tax-exempt real estate assets under management ($ millions)
AETNA LIFE INSURANCE COMPANY 151 Farmington Avenue Hartford, CT 06156	John C. Lang Vice President 203/273-7361	7,900	3,700 general accounts 25 equity separate accounts	7,900
AMERICAN PRINCIPALS CORPORATION The American Building 2262 Carmel Valley Road San Diego, CA 92014	Gregory D. Fitzpatrick Counsel 714/381-8181	4,000	100+	N/A
AMFAC MORTGAGE CORPORATION Suite 380 Lloyd 500 Building 500 N.E. Multnomah Portland, OR 97034	Michael D. Elton Vice President 503/243-1708	1,300	3-5	None[1]
BANK OF AMERICA Investment Real Estate 180 Montgomery Street P.O. Box 37026 San Francisco, CA 94137	David Madison Assistant Vice President 415/622-6526	215	242	60
BRENTON BANKS, INC. Sixth & Walnut P.O. Box 5193 Des Moines, IA 50306	Robert E. Leech Vice President-Trust 515/244-1981	20	3	3
ALEX BROWN REALTY CO. 135 East Baltimore Street Baltimore, MD 21202	Turner B. Smith Executive Vice President 301/727-1700	60	15-20	20
CALIFORNIA FEDERAL SAVINGS & LOAN ASSOCIATION 5670 Wilshire Boulevard Los Angeles, CA 90036	David J. Reed Senior Vice President 213/932-4567	6,000	46	N/A
CAPITAL CONSULTANTS, INC. 2300 S.W. First Portland, OR 97201	David Nelsen Vice President James Crumpacker Assistant Vice President 503/241-1200	104	25	104
CITADEL INVESTMENT COMPANY 17842 Irvine Boulevard Suite 200 Tustin, CA 92680	William Restivo President 714/838-5521	150	40	50
CITIZENS ADVISORY CORPORATION 20525 Center Ridge Road #505 Rocky River, OH 44116	Robert M. Welsh President	16.0	1	16.0
COLDWELL BANKER CAPITAL MANAGEMENT SERVICES 533 Fremont Avenue Los Angeles, CA 90071	Vincent F. Martin, Jr. Senior Vice President-Manager 213/613-3511	220	15	220
CONTINENTAL BANK 30 North LaSalle Street Chicago, IL 60693	T. W. Thompson Vice President 312/828-8460	400	84	50

[1]Pension fund clients are under portfolio management, but real estate investment not yet made.

Breakdown of assets into real estate holdings	Participation offered	Geographical diversification	Minimum investment	Return on investment (Net of fee)	Fee
Mortgage loans and income producing properties	Commingled	National	$100,000	13.82% in equity separate accounts	.95%
Income producing properties	High-yield first mortgages; free-and-clear commercial properties and equity placements	Southwest	$25,000	9-16%	Negotiated
$400 million+ — income property mortgage; balance — land, residential and income properties	Open	Eight western states	$500,000	Participant requirements	Open
Income producing properties	Open-end commingled fund (BAREF) and separate accounts	National	BAREF — $50,000 Separate accounts — $2 million	BAREF — 10.00% from inception (9/15/75) through 3/31/80	BAREF — 1% of net assets; Separate accounts — variable
90% farmland 10% income properties	Full ownership of property	Iowa	$500,000	Varies	Negotiated
Income producing properties	Limited partnerships	East, Southeast, Southwest	$500,000	8-10%	Negotiable
—	90/10 participation in mortgage passthrough	California	$1 million	Varies	Varies
90% mortgages; 10% income producing properties (offices, light industrial, commercial)	Closed equity funds, mortgages	Pacific Northwest	$1 million	9.5-10% Cash on cash	Varies
Multi-family, land, land development, first and second mortgages, convertible mortgage	Both equity and debt	Arizona, California, New Mexico, Nevada	$25,000	10-50%	Varies
Mortgages — $5.0 million; undeveloped land — $10.8 million; apartment — $250,963	Negotiable	Midwest, Southeast	Negotiable	Negotiable	Negotiable
Income producing properties	Participation in a closed end fund based on *pro rata* investment	National	$1 million	Varies by fund	1% per year based on asset cost plus a performance incentive fee
Tax-exempt — 42% income producing properties, 58% mortgages with participations; Taxable portion — primarily income producing urban and agricultural equities.	Direct purchase and participation in open end fund	National — concentrated in nine midwestern and southern states	$1 million direct purchase for Fund, 1 unit ($2,000)	Fund = 11.9% fiscal 1979	Fund — 1% of unit value

Name and address	Person to contact, phone	Total assets under real estate management ($ millions)	Number of tax-exempt real estate clients	Total tax-exempt real estate assets under management ($ millions)
CROCKER NATIONAL BANK Real Estate Investment Group 44 Montgomery Street Suite 2110 San Francisco, CA 94104	J. Arthur DeBoer Vice President 415/477-8550	88.9	200	75.9
DATA REALTY CORPORATION 358 Chestnut Hill Avenue Boston, MA 02146	John M. Peckham, III President	20	5	5
RICHARD ELLIS 200 East Randolph Drive Suite 6545 Chicago, IL 60601	Bradley A. Olsen 312/861-1105	200	2 as direct investment clients; 20 as part of pooled funds (all U.K. entities)	190 (exempt in U.K. only)
EQUITABLE LIFE ASSURANCE SOCIETY OF THE U.S. 1285 Avenue of the Americas New York, NY 10019	Theodore Q. Demeritte Assistant Vice President 212/554-2352	14,200	202	7,200
EQUITY INVESTORS, INC. 29001 Cedar Road Suite 325 Cleveland, OH 44124	Dan K. Silverberg President 216/442-4820	80	10	10
EQUITY PROPERTIES CORPORATION 25th Floor First American Center Nashville, TN 37238	James S. F. Boyd President 615/242-4417	50	410	40
FIRST FEDERAL SAVINGS 3003 North Central Room 406 Phoenix, AZ 85012	Anthony D. Falconieri Senior Vice President 602/248-3599	1,700	10	120
FIRST NATIONAL BANK IN DALLAS P.O. Box 83771 Dallas, TX 75283	Nathan O. Finke Vice President-Trust 214/744-8323	200	26	50
FIRST NATIONAL BANK OF BOSTON 100 Federal Street Boston, MA 02110	Peter F. Tague, III Vice President/ Marketing Director 617/434-4560	75	157	75
THE FIRST NATIONAL BANK OF CHICAGO 16th floor, S.E. 1 First National Plaza Chicago, IL 60670	Charles M. Spear Vice President 312/732-6474	516	71	278 (Fund F — 241); office buildings, convenience shopping centers and net-leased single tenant industrials
FIRST NATIONAL BANK OF FORT WORTH P.O. Box 2260 Fort Worth, TX 76101	G. L. Weaver Vice President/ Trust Officer 817/390-6902	100	6	10
GALBREATH MORTGAGE COMPANY 101 East Town Street Columbus, OH 43215	Gillis G. Pratt, Jr. President 614/460-3100	1,400	9	182 (mortgages)

Breakdown of assets into real estate holdings	Participation offered	Geographical diversification	Minimum investment	Return on investment (Net of fee)	Fee
$65 million income producing; $10.9 million joint venture development separate account; $13 million another separate account	Whole units	National	$5,000 pooled; others individual	12.9 pooled; 22.3 joint venture; N/A others	1.2% annually, charged to pooled fund monthly; others vary depending on services provided
Income producing properties	Open	Investment acquisition throughout U.S.A./ management primarily in New England states	$100,000	Varies depending on financial goals	Varies depending on property and location
92% income producing property; 8% mortgages	Outright ownership or joint venture with client owning 50% or greater interest	Midwest, Southeast and West	$3 million for direct investment; $500,000 for pooled investment	6-9% initial yield; 12-15% internal rate of return	Acquisition: 1½% of gross purchase price; Portfolio management: ½% of asset valuation per annum; Property management: 2-5% of gross income per annum
Construction loans, land development, long-term mortgages	Subscription program	National	None	14.8%	Variable per transaction
100% real estate holdings (equities)	Limited partnerships only	Atlanta, Houston, Dallas, The Carolinas and Ohio	$750,000	Varies from 6-11% on equity invested	Negotiable, but brokers fully protected
$10 million — undeveloped land; $40 million — income producing properties	Consulting and management	Southeast	$250,000	8-10%	Negotiated
—	90% interest in mortgage loan pools of residential or commercial loans	Arizona and California (San Diego County)	$1 million	Market rate — usually 50 basis points over GNMA yields in cash market	None
Income producing properties	Pooled fund or individual properties	Southwest	$50,000	11-12%	1% of market value annually
Income producing properties	Fund participation	National	None	11.6% ending 6/30/80	1%
Fund F portfolio — 96.4% income producing properties and 3.6% mortgages	Fund F — open end commingled fund	National	None	Returns net of fees are not published. Return before fees is 16.6% (5/31/80 y-t-d)	Basic charge: $1,000 plus 1.2% of real estate market value
N/A	Real estate equity investments and mortgages	Texas and Southwest	—	—	Fee schedule furnished upon request
$51 million — residential; $131 million — income property mortgages	90% construction loans 10% long-term mortgages	Continental U.S.A.	$1 million — residential $3 million — income properties	Market yields less servicing fee	Varies from five to 40 basis points depending on loan type, loan size and services rendered

Name and address	Person to contact, phone	Total assets under real estate management ($ millions)	Number of tax-exempt real estate clients	Total tax-exempt real estate assets under management ($ millions)
GENERAL MORTGAGE 14323 South Outer Road St. Louis, MO 63017	Burl L. Garrison President 314/878-6600	10	Less than 5	2
GREAT-WEST LIFE ASSURANCE COMPANY 60 Osborne Street North Winnipeg, Manitoba R3C 3A5	G. N. Coopland Pension Investment Officer 204/946-9342	500	Real estate investment fund offered as of 6/30/80	15 in the first two months; expected to grow to 100-200 over the first two years
JOHN HANCOCK MUTUAL LIFE INSURANCE COMPANY John Hancock Plaza P.O. Box 111 Boston, MA 02117	Richard Troy Vice President/Sales 617/421-6294 Richard Burns Second Vice President Real Estate 617/421-2964	265	45	265
HENDERSON INVESTMENT CORPORATION P.O. Box 2048 Orlando, FL 32802	Edmond R. Henderson President 305/423-1225	10	N/A	6
HERITAGE CORPORATION OF SOUTH FLORIDA 1318 N.W. Seventh Street Miami, FL 33136	Edward Feinstein President 305/324-4000	10	2	2
HORVITZ ENTERPRISES 4151 Middlefield Road Palo Alto, CA 94303	Carl Horvitz President 415/493-5555	25	10	6
JMB INSTITUTIONAL REALTY COMPANY John Hancock Center 875 N. Michigan Avenue Suite 3900 Chicago, IL 60611	John S. Lillard President 312/440-5042	2,000	10	40 (committed)
THOMAS L. KARSTEN ASSOCIATES 10960 Wilshire Boulevard Los Angeles, CA 90024	A. Redmond Doms Senior Vice President 213/473-1128	40	1	40
LANDSING 431 Burgess Drive Menlo Park, CA 94025	J. Grayson Sanders Executive Vice President 415/323-8313	150	3	10
LA SALLE ADVISORS, INC. 208 South LaSalle Street Chicago, IL 60604	Kenneth M. Campia President 312/782-5800	300	8-12	100 (projected for end of 1980)
LEHNDORFF MANAGEMENT LIMITED 3737 Noble Avenue Suite 200 Dallas, TX 75204	M. Thomas Lardner Executive Vice President and General Manager 214/670-0400	1,000 in North America	None[2]	None[2]
LIEBERMAN COMPANIES 554 Middle Neck Road Great Neck, NY 11023	Bruce R. Lieberman President 516/466-6565	30	1	2.5
LOEB PARTNERS REALTY 521 Fifth Avenue New York, NY 10175	Gary L. Naughton Vice President 212/883-0371	250	5	100
JOHN MCMAHAN ASSOC. 201 California Street Suite 400 San Francisco, CA 94111	Joseph Azrack Vice President 415/433-7770	25	2	None[1]

[1]Pension fund clients are under portfolio management, but real estate investment not yet made.

[2]Pension fund real estate clients are foreign and not tax-exempt.

Breakdown of assets into real estate holdings	Participation offered	Geographical diversification	Minimum investment	Return on investment (Net of fee)	Fee
75% family mortgages; 20% income producing mortgages; 5% real estate managed	All types	Midwest	None	—	—
Assets to be invested in real property	Pooled fund units which are valued monthly	Canada	No minimum	N/A	.72 of 1% in addition to regular downscaled investment management fees
Income producing properties	Commingled funds	National	$500,000	19.3%	1%
Income producing property	Partial or whole ownership	Southeast	$50,000	6-12	Varies
$5 million — income producing property; $5 million — vacant land	Varies	Florida	$500,000	Varies	1-3%
Income producing property	Negotiated	West — preferably California	$2 million	Negotiable	Negotiable
Income producing properties	Equity only	National	$150,000	8% expected	1.25% per year
Mortgages	—	West and Southwest	None	Varies	Negotiable
Income-producing real estate, garden apartments, shopping centers, office/ industrial buildings	Closed and equity trust, participating debt, fee ownership	West	$1 million	Not reported	Negotiable
Income producing property	Ownership of shares in commingled fund with preemptive rights for future funding for initial subscribers	National	$250,000	—	Advisory fee 1.25%
85% income producing property; 10% undeveloped land; 5% mortgages	Varies	National	$2.5 million	Varies	Varies
Income producing	Varies	Southeast, Southwest	$500,000	Varies	Negotiable
90% income producing properties; 10% undeveloped land	None	Continental U.S.A.	$1 million	None	Negotiated
100% income producing properties: office, shopping centers, R&D, and light industrial properties	100% equity ownership and whole mortgages	Metropolitan areas primarily in sunbelt states and west of the Mississippi	$20 million recommended for direct investment	Varies depending on type of participation and property characteristics	Percentage of assets under management

Name and address	Person to contact, phone	Total assets under real estate management ($ millions)	Number of tax-exempt real estate clients	Total tax-exempt real estate assets under management ($ millions)
MERRILL LYNCH, HUBBARD, INC. One Liberty Plaza, 19th floor New York, NY 10080	Robert Kinney Vice President 212/637-4492	350	8	250
METROPOLITAN LIFE INSURANCE CO. One Madison Avenue, Area 2-H New York, NY 10010	Peter E. Braun Assistant Vice President 212/578-2937	13,628.7 (12/31/79)	8	45 (7/1/80)
NORTH CAROLINA NATIONAL BANK One NCNB Plaza Charlotte, NC 28255	Floyd T. Boyce Vice President/Trust Officer 704/374-8851	85	178	32.5
NORTHLAND MORTGAGE COMPANY 6600 France Avenue South Suite 570 Minneapolis, MN 55435	Ivan S. Kerr Executive V.P. 612/925-7736	100 — real estate portfolio 1,500 — mortgage servicing	10	30
OLD DOMINION REAL ESTATE INVESTMENT TRUST 8754 Landmark Drive Richmond, VA 23228	John P. McCann President 804/264-9158	21	25 (shareholders)	Varies with market value
OPPENHEIMER PROPERTIES, INC. One New York Plaza New York, NY 10004	James H. Levi President 212/825-8180	750	20	50
PACIFIC INVESTMENT MANAGEMENT CO. P.O. Box 9000 Newport Beach, CA 92660	Wayne W. Silzel Mortgage Loan Portfolio Manager 714/640-3777	35.6	3	35.6 (5/30/80)
PEARCE MAYER & GREER, INC. 90 Park Avenue New York, NY 10016	Robert Graham Senior Vice President 212/682-1400	50+	5	28
PENSION HOME LOAN CORPORATION 21535 Hawthorne Boulevard Suite 300 Torrance, CA 90503	Karl Harz President 213/540-4003	5	50	2
PREFERRED FINANCIAL CORPORATION 18321 Ventura Boulevard Tarzana, CA 91356	Peter L. Saltman Director of Special Industries Group 213/881-9032	130	100+	4
PROPERTY CAPITAL ADVISORS, INC. 200 Clarendon Street Boston, MA 02116	John A. Cervieri, Jr. President 617/536-8600	300+	Approximately 50	300
PRUDENTIAL INSURANCE COMPANY OF AMERICA Group Pension Department Prudential Plaza Newark, NJ 07101	Robert H. Dunphy Vice President 201/877-7884	18,000+ (3/31/80)	205 (3/31/80)	1,744.1 (3/31/80)
REPUBLIC NATIONAL BANK OF DALLAS P.O. Box 241 Dallas, TX 75221	David J. Pittman Vice President and Trust Officer 214/653-6506	125	20	30

Breakdown of assets into real estate holdings	Participation offered	Geographical diversification	Minimum investment	Return on investment (Net of fee)	Fee
25% income producing properties; 75% mortgages	Direct portfolio ownership	National	$5 million debt portfolios; $10 million equity portfolios	Depends on client policy	Negotiated
43.2% income producing properties; 19.2% mortgages; 31.6% construction loans; 6.0% other	Purchase of units in commingled fund	National	$100,000	One-year average annualized rate of return to 3/31/80 — 19.2%	1% of net assets
71% income producing properties; 15% mortgages; 14% undeveloped land	Individually structured portfolio or commingled fund	Southeast	$5 million initial commitment for individual portfolio; No minimum for commingled fund	Compounded annual rate of 12% since inception of real estate fund	1.2% of market value annually
Income producing properties — $75 million; undeveloped land — $30 million; mortgage servicing — $1.5 billion	—	National	Open	Open	Open
Income producing properties (apartments, shopping centers)	Shares of beneficial interest, traded OTC	Virginia and Southeast	—	Dividend yield: 9% Cash flow: 11%	None
Income producing properties	Outright purchase, joint ventures, mortgages	National	$1 million	Varies	None
Commercial property loans — $5.1 million; single-family residential loans — $30.5 million (5/30/80)	Intermediate and long-term financing, whole loans only	National	$1 million on commercial property loans	Market rates	Negotiable
—	Brokerage and management	National	$3 million	Varies	Open
Mortgages	Whole or part of mortgage offering	California	$10,000	Varies	None
Income producing properties	Limited partnerships	Sunbelt states	$5,000-$20,000	12% minimum	Varies
Income producing properties — $200 million+; subordinated mortgages — $100 million	Varies	Continental U.S.A.	$1 million	Varies depending on type of investment	Negotiable
Income producing properties — $1,569.3 million; mortgages — $18.4 million; Short-term investments, accrued investment income, other: $156.4 million (3/31/80)	Open-end fund limited to pension plans which qualify as contract-holders	National	$50,000 with reasonable expectation of $200,000 annually	28.0%	1.5% of gross assets of Prudential Property Investment Separate Account, subject to change
30% income producing; 33% mortgages; 37% undeveloped land	Private placement and pooled fund (closed end)	Sunbelt and major population centers	$1 million	N/A	Published schedule available on request

Name and address	Person to contact, phone	Total assets under real estate management ($ millions)	Number of tax-exempt real estate clients	Total tax-exempt real estate assets under management ($ millions)
THE RREEF CORPORATION 650 California Street San Francisco, CA 94108	Alander F. Hogland Principal 415/781-3300	540	25	540
RREEF MIDAMERICA 200 E. Randolph Drive Chicago, IL 60601	Donald A. King, Jr. Principal 312/938-0100	540	25	540
SAMOTH REAL ESTATE CORPORATION, LTD. 1213-345 Quebec Street Victoria, B.C. V8V1W4	Richard D. B. Talbot President 604/388-5123	200	10	50
SCUDDER REALTY ADVISORS, INC. 333 South Hope Street 37th Floor Los Angeles, CA 90071	David R. Bryant Vice President 213/628-1144	210	Predominantly tax-exempt	210
SMITH BARNEY REAL ESTATE CORPORATION 1345 Avenue of Americas New York, NY 10019	Stephen Treadway Vice President 212/399-6505	275	22	40
STARKEY BRIGHT & WILLIS 18023 Sky Park Circle, F-2 Irvine, CA 92714	Dan B. Starkey President 714/549-1930	33	54	14
RALPH C. SUTRO COMPANY 4900 Wilshire Boulevard Los Angeles, CA 90010	Terry Flowers Senior Vice President John Collins Senior Vice President 213/937-4000	2,100	25	300
THE TRAVELERS INSURANCE COMPANY One Tower Square Hartford, CT 06115	Thomas E. Keating Vice President 203/277-7777	6,000	30	6,000
UNION FEDERAL SAVINGS & LOAN 523 West Sixth Street Los Angeles, CA 90014	Dave A. Underwood Vice President 213/688-8513	1,000	35	45
WACHOVIA BANK AND TRUST COMPANY P.O. Box 3099 Winston-Salem, NC 27102	Peter R. Hilgert Vice President 919/748-6103	500	308	200
WELLS FARGO REAL ESTATE EQUITY FUND 475 Sansome Street, #975 San Francisco, CA 94111	Thomas W. Richardson, Jr. Vice President 415/396-5094	4,000	85	103

Breakdown of assets into real estate holdings	Participation offered	Geographical diversification	Minimum investment	Return on investment (Net of fee)	Fee
Income producing properties	Units and shares of beneficial interest	Seattle, Portland, Denver, San Francisco, Sacramento, Los Angeles, Orange County, San Diego, Phoenix	$1.05 million	N/A	N/A
Income producing properties	Units of beneficial interest	Chicago, Cleveland, Columbus, Dallas, Cincinnati, Dayton, Detroit, Houston, Indianapolis, Kansas City, Milwaukee, Minneapolis, St. Louis	$1.05 million	N/A	N/A
$150 million — income producing properties; $50 million — mortgages and undeveloped land	Negotiable	Western states and provinces	$1 million +	Negotiable	Negotiable
20% income producing properties; 80% mortgages	Investment adviser or manager of real estate portfolio	West	$25 million +	Dependent on client	Continuing supervision fee of 1/5 of 1% for mortgages and credit purchase/leasebacks and ½ of 1% for equity investments, plus initial research and processing fee
Income producing properties	Units of participation in commingled fund	Currently East and Southeast	$250,000	15.3% (1979)	Based on contributed capital and cash distributions
Income producing properties	Limited partnerships and individual ownership	West	$5,000	10% minimum plus after guarantee	Varies
Income producing properties — commercial properties, insured residential, conventional residential, GNMA pools	Construction loans, take-out loans, interim financing, portfolio servicing	National	Open	Varies	Negotiable
Separate account R breakdown — 75% income producing properties; 25% mortgages (5/31/80)	Separate account R (open ended pooled fund)	East, South, Midwest and West	$100,000	10.3% (1979)	1% (effective annual) of net assets
Mortgages	Outright sale	California and Arizona	$500,000	Negotiable	Negotiable
65% fully leased developed properties; 25% land in development stage; 10% cash earmarked for equity development and miscellaneous	Units of pooled fund or individually managed portfolio	National	None	Published schedule available	1% on fully developed properties
100% income producing properties — 50% industrial, 25% office buildings, 25% shopping centers	Commingled fund and separate accounts	West and Southwest	$100,000	13.9% (1979)	1.25% of net assets

NOTE

This Microfiche meets the quality requirements of the American National Standard for Microfiche of Documents (ANSI PH5.9-1975). However, because of imperfections in the document from which it was made, it contains images that are illegible or difficult to read. Although better copy could not be obtained prior to filming, the Microfiche will be replaced should better copy later become available.

Congressional Information Service, Inc.
Washington, D.C.
CIS

NOTE

ONLY THE FOLLOWING PAGES OF THIS PUBLICATION

HAVE BEEN FILMED

Cover 1, p. 2,

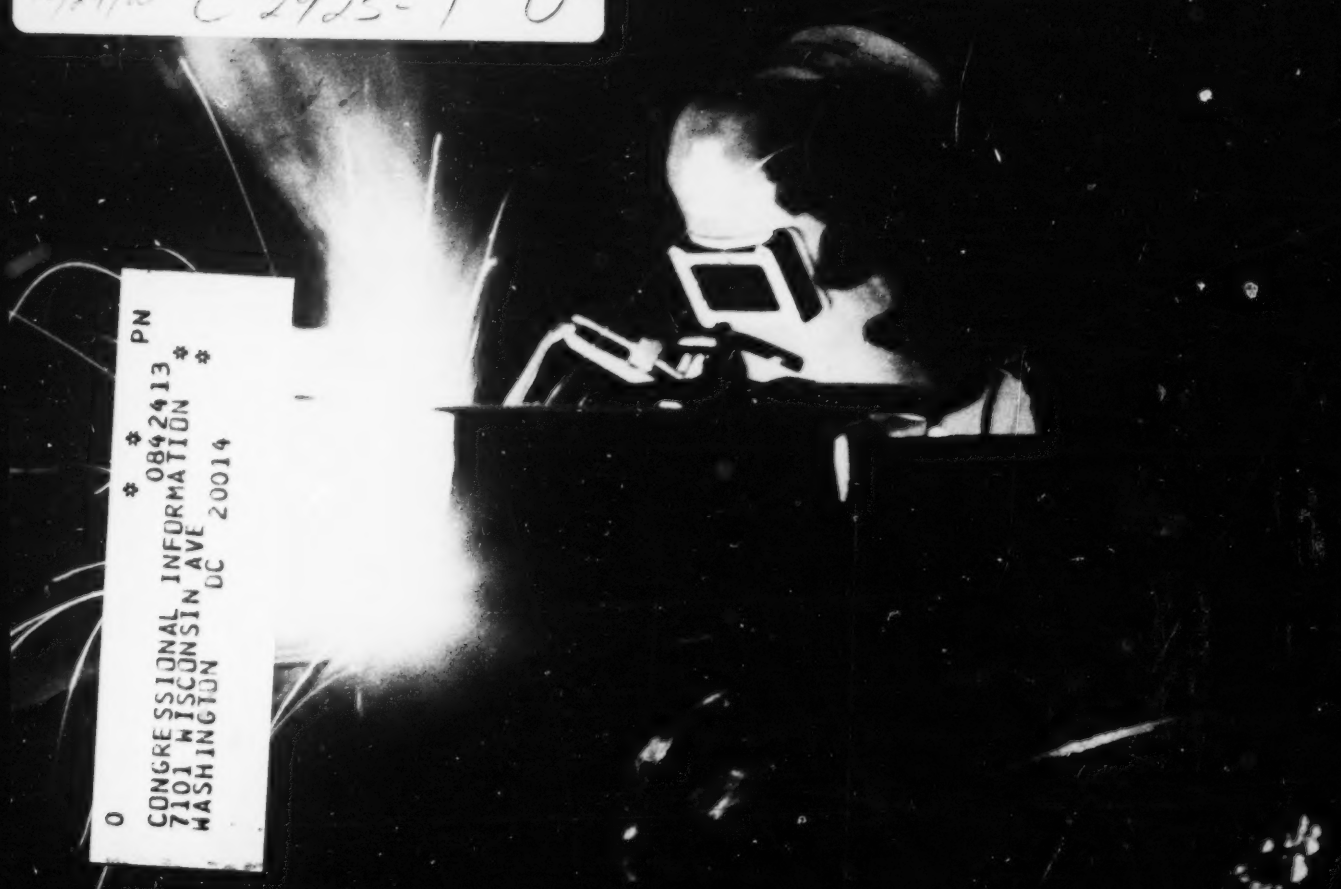
30-32, 34.

OCTOBER 1980

Pension World

The Magazine for Plan Sponsors | A Publication of Communication Channels, Inc.

10/24/80 C 24/25-1 U



0 ** 08424 13 PN **
CONGRESSIONAL INFORMATION
7101 WISCONSIN AVE
WASHINGTON DC 20014

Directory of Insurance Company Employee Benefits Services

Pullman gears its fund for the long haul

Insurance firms' new products

In pursuit of customized GIC's

October 1980

Pension World

Volume 16 Number 10

The Magazine for Plan Sponsors /. *A Publication of Communication Channels, Inc.*

Joseph Shore
President
Cyril Lee Ellison
Publisher
Diana H. P. Roberts
Editor
Marie Powers
Assistant Editor
Steven E. Schanes
Editorial Consultant
Charles E. Lloyd
Advertising Director
Martin Greene, Production Director
Fran Rappaport, Production Mgr.
Brian Buxton, Art Director
Elmer Dalton, Circulation Director
Joan Robinson, Circulation Mgr.

Contributing Editors

Ronald Derven **Noel Arnold Levin**
Morris Stone **Ernest Quickel**
Robert A. Levy

Editorial Advisory Board

Clayton A. Boggan, Jr.
Wachovia Bank & Trust Company
Eugene B. Burroughs
International Brotherhood of Teamsters
Ernest J. E. Griffes
Levi Strauss & Company
Fred Halperin
Coldwell Banker R.E. Mgmt. Services
Michael F. Klein, Jr.
Price Waterhouse & Company
Jack H. Leylegian II
Bank of America NT&SA
Ray L. Lillywhite
Alliance Capital Management
Matthew M. Lind
Travelers Insurance Companies
Malcolm D. MacKinnon
Prudential Insurance Company
Jeffrey D. Mamorsky
Vedder, Price, Kaufman, Kammholz & Day
Judith F. Mazo
Martin E. Segal Company
Paul T. Shultz
Towers, Perrin, Forster & Crosby
Michael N. Thome
Calif. Teachers' Retirement System
Kenneth W. Tolo
University of Texas
Anthony Wilson
Continental Ill. National Bank

FEATURES

14 Gearing the portfolio for the long haul
by Ronald Derven
Pullman's investment duo takes a three-pronged approach to drive a prospering pension portfolio.

21 Insurance firms offer new investment products
by Alix Conrad
Eight national firms disclose the basics of their up-and-coming investment packages.

25 In pursuit of customized GIC's
by Sandy A. Lincoln
A plan sponsor can usually get the provisions he wants in a GIC. Here's how to go about it.

30 By-passing real estate investment risks
by Frederick M. Sessoms
A real estate expert tells how to put pass-through securities to work for your plan.

36 1980 *Pension World* Employee Benefits Awards
Pension World announces the winners of its Employee Benefits Awards, recognizing five outstanding persons.

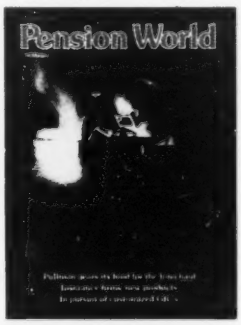
48 Whither goest the Social Security system?
by Ronald L. Haneberg
The report of the Advisory Council on Social Security is singled out in this spirited analysis.

55 Annual Directory of Insurance Company Employee Benefit Services
Pension World presents a comprehensive listing of the types of plans, insurance services, actuarial and legal services, and investment services offered by 70 insurance firms.

DEPARTMENTS

4 International Pension World
8 Washington Newsletter
41 Pension News
44 Pension People
46 Meetings and Conventions
62 Cases & Rulings
64 What Every Fiduciary Should Know
68 Arbitration Awards

Cover: A Pullman welder fabricates part of a piping assembly for a generating station. How Pullman fabricates its pension plan begins on page 14.



BPA

Pension World is published monthly by Communication Channels, Inc., Joseph Shore, President; B.J. Kotsher, Executive Vice President, Betty Dornbush, Treasurer. Editorial and advertising offices at 6285 Barfield Road, Atlanta, GA 30328. Telephone (404) 256-9800. Pension World is a registered trademark of Communication Channels, Inc. © 1980 by Communication Channels, Inc. Controlled circulation postage paid at Shepherdsville, KY (USPS 502-110) and Atlanta, GA (USPS 410-030). Subscription rates: U.S.A., 1 year, $34; 2 years, $59; Canada and Mexico, 1 year, $36; Foreign, 1 year, $42. Single copies, $3.00. The opinions expressed by authors and contributors to Pension World are not necessarily those of the editors or publisher. Articles appearing in Pension World may not be reproduced in whole or in part without the express permission of the publisher. Microfilm copies of Pension World are available from University Microfilms, 300 North Zeeb Road, Ann Arbor, MI 48106. Postmaster: Please send form 3579 to Circulation Department, Pension World, 6285 Barfield Road, Atlanta, GA 30328.

Pass-through securities

by Fred M. Sessoms

In the past, the problem with real estate-oriented investments for pension money managers was that the inherent risks involved in an investment market long regarded as entrepreneurial far outweighed the possibilities for potential high returns on invested dollars. The next step was obvious, and follows the "If you can't bring Mohammed to the mountain . . ." adage. The real estate market had to adapt itself to the investment criteria of pension money managers: "preservation of plan assets through investments which offer a high rate of return with a minimum of risk." With the relatively poor performance of the stock and bond markets following 1970, the timing had never been better.

Beginning in 1970, the first real attempt to attract Wall Street type dollars (such as money in employee benefits plans) into the residential real estate market was the introduction of the Government National Mortgage Association "Ginnie Mae," mortgage-backed, pass-through security. Ginnie Mae's, guaranteed by the Government National Mortgage Association, are issued by mortgage bankers, commercial banks, savings and loan associations, savings banks, and other institutions and are predominately backed by FHA, VA, or FmHA home mortgages. The Ginnie Mae security holder is protected by the full faith and credit of the U.S. government.

Ginnie Mae pass-through securities have gained wide investor acceptance since their inception, with over $70 billion in outstanding securities and new originations of over $15 billion per year.

Soon after the introduction of Ginnie Maes, the Participation Certificate (P.C.) issues of the Federal Home Loan Mortgage Corporation ("Freddie Mac") followed. P.C.'s are certificates secured by pools of conventional home mortgage loans, their principal and interest guaranteed by the Federal government through "Freddie Mac." P.C.'s also enjoy a healthy level of respect from the investment community, as there are currently close to $15 billion in securities outstanding, with dealers in the secondary market trading over $20 billion per year.

The total mortgage debt outstanding on real estate has grown from $72.8 billion in 1950 to $1,334.3 trillion through 1979. During the entire period from 1950 to 1979, one-to-four unit residential mortgage debt has never fallen below 60 percent of the total outstanding real estate mortgage debt.

Outstanding mortgage debt through 1979 on one-to-four unit residential properties stood at an unprecedented $872.1 billion, or 65.3 percent of the total. Of this total, conventional mortgage loans were much greater than the outstanding debt represented by FHA and VA mortgage financing. The once popular FHA loan introduced in the 1930's became overshadowed in the 1960's by the conventional mortgage. Many reasons contributed to this shift, foremost among them continued inflation, keeping interest rates at high levels. Acceptability of conventional mortgages was also stimulated by the advent of private mortgage insurance, which allows lenders to make high loan-to-value ratio mortgages without bearing all the risks.

It is clear that Ginnie Mae mortgage-backed securities and Freddie Mac Participation Certificates do not come close to tackling outstanding mortgage debt. Even with adding the estimated $70 billion per year refueled into the industry through direct whole loan and participation secondary market sales, the burgeoning needs still are not matched.

The mortgage industry is finding ways to narrow outstanding mortgage debt by tailoring the residential mortgage into sophisticated investment packages which are catching the eye of pension money managers across the country. Gaining rapidly in acceptability are private and publicly placed mortgage-backed pass-through securities, collateralized by conventional mortgages, issued by savings and loans, commercial banks, mortage bankers, and private mortage insurance companies. The Department of Labor, in a recent publication, describes these pass-throughs as investment pools, the corpus of which consists of first mortgage notes either originated by the sponsor of the pool or purchased by the pool sponsor directly from the mortgage lender, as in cases with private mortgage insurance companies (The Department of Labor uses the word *sponsor* to indicate the organizer of a pool to avoid confusion as to the actual originator of the underlying mortgage loans.)

The assembled mortgage documents are transferred by the pool sponsor to an independent fiduciary known as the trustee. The pool trustee then transfers to the pool sponsor certificates representing fractional, undivided beneficial interests in the pooled mortgages. The certificates are then issued by the pool sponsor in public or private offerings to investors, including employee benefits plans. Principal and interest payments made by individual mortgagors are

Frederick M. Sessoms is vice president of Wannamaker Associates in Hilton Head Island, S.C.

passed through the mortgage pool in the form of fixed monthly payments to certificate holders, with the pool sponsor retaining a fixed percentage of the interest as a servicing fee. The monthly remittance of principal and interest is important to many pension money managers who prefer ongoing cash flow.

A description of the Bank of America mortgage pass-through security program better describes the intricate workings of this investment package. Since inception of pass-throughs, the Bank of America has issued pools with aggregate principal amounts exceeding $600 million. The aggregate principal amount of all issues, including those of B of A, is just over one billion dollars.

The first step in the Bank of America program, as with any pass-through issue, is the selection of mortgages previously originated to be included as pool collateral. The Bank of America program stipulates that mortgage loans chosen for a mortgage pool must be single-family mortgage loans (rather than construction or land development loans) secured by mortgages on non-farm property comprising one-to-four dwelling units. Collateral used by other issuers may vary. These mortgages must have a loan-to-value ratio of 80 percent or less and principal balances between $20,000 and $150,000. Principal and interest must be payable on a level debt service basis, i.e., monthly, whereby principal is repaid on an accelerated basis over the life of the loan. Mortgaged properties securing the loans included in the pool must be geographically dispersed throughout the lender's servicing area.

Once the selection process is completed, mortgages that meet the outlined criteria are shipped to the pool trustee, a totally autonomous entity of the issuer. It is the trustee's duty to verify that each mortgage is a valid first lien, that the issuer has clear title to each mortgaged property, and that all loan documentation is complete. Basically, if these conditions are met, the trustee, in turn, ships pass-through certificates to the issuer for private or public sale.

If the conditions are not met — for example, if the issuer does not have complete loan documentation — it is the issuer's duty to either repurchase, replace, or correct the situation with adequate documentation. The relationship between the issuer and the trustee is known as the pooling and servicing agreement. Viewed simply, it is an agreement setting forth a system of checks and balances lasting throughout the life of the mortgage pool. The issuer agrees to continuously service each of the mortgage loans, and the trustee's watchful administration makes certain the issuer lives up to his original end of the bargain. If for some reason the issuer/servicer defaulted or went bankrupt, the trustee would assume his duties.

The issuer, under the pooling-servicing agreement, sets the pass-through rate, or the investor's rate of return, as specified on each of the certificates. This pass-through rate is produced after taking several considerations into account. The most important consideration is plotting the pass-through rate to the prevailing money market. Also, the pass-through rate is never

Total Assets

	Commercial Banks	Life Cos.	S&L's	MSB's	Pension Funds
1950	168.9	64.0	16.8	22.4	25.0
1955	202.4	90.4	37.6	31.3	75.0
1960	257.5	117.9	71.5	40.3	100.0
1965	361.7	156.0	129.6	58.2	200.0
1970	576.2	203.9	172.9	77.8	260.0
1975	934.4	280.5	333.4	118.6	480.0
1980	1,486.5	435.0	585.6	163.3	560.0

Figures in billions of dollars; all figures rounded; 1980 figures through April 1980.
Pension Assets: Estimates from reliable industry sources.
Source: Federal Reserve Board

Mortgage Debt as a Percentage of Total Assets

	Commercial Banks	Life Cos.	S&L's	MSB's	Pension Funds
1950	8.0%	25.2%	81.0%	37.0%	N/A
1955	10.4%	32.5%	83.5%	50.0%	N/A
1960	11.9%	35.4%	84.0%	67.0%	N/A
1965	13.7%	38.5%	85.1%	76.6%	N/A
1970	12.4%	36.0%	85.4%	73.3%	N/A
1975	14.3%	31.4%	82.1%	51.4%	N/A
1980	18.0%	28.0%	81.3%	61.0%	3.0%

Given that the pension money manager can achieve the high rate of return he is looking for by investing in pass-throughs, where is the by-passing of risks, necessary to preserving plan assets?

higher than the lowest mortgage interest rate found in the pool. The pass-through rate is used as a base in pricing by the issuer, whereby, due to market conditions, the issuer can offer certificates to investors at both an acceptable price and return on invested dollars.

Let's examine a hypothetical market example. As a pension money manager, you have decided to diversify your portfolio toward mortgage investments. You look at the residential mortgage market and see that a whole loan or participation sale from an originator is available at a 12 percent yield. A "tombstone" you notice in the *Wall Street Journal* asserts that an issuer is offering mortgage pass-through certificates at a stated rate of ten percent. Clearly, the issuer, taking current market conditions into account, must price the certificates applicably at a favorable discount in order to compensate for the difference.

Opposite to pricing at a discount, pricing at a premium is a condition which has happened, but is not a frequent occurrence in normal market cycles. Suppose you go to the market and see that prevailing home mortgage rates are ten percent, and the pass-through rate on an issue you notice is 12 percent, thereby priced at a premium. Looking for a long-term investment, it would probably be more prudent to stay away from the pass-through because paying the premium for extra yield would probably put you in a situation where the mortgages collateralizing the issue stand a good chance of being prepaid earlier than expected, due to refinancing by individual home buyers.

On an issue collateralized by 30-year, fixed-rate mortgages, the issuer retains the difference in interest between the pass-through rate and the interest rate on each loan in the pool, compensating him for servicing and other costs incurred. In addition, the issuer usually retains any prepayment or late payment fees from mortgagors.

Remembering that the pass-through rate is never higher than the lowest interest rate in the pool, a situation may occur where this rate appears to be substantially lower than the average interest rates in the pool, and it seems that the issuer is getting wealthy at your expense. This is not the case. The bulk of these proceeds goes to pricing the certificates at a discount in order to offer an acceptable rate of return for investors. Other expenses must be paid by the issuer as specified in the pooling-servicing agreement, such as the trustee's fees, mortgage guaranty pool and hazard insurance premiums, legal expenses, etc.

Given that the pension money manager can achieve the high rate of return he is looking for by investing in pass-throughs, where is the by-passing of risks, necessary to preserving plan assets? After all, when investing in Ginnie Maes and P.C.'s, the holder is guaranteed the timely payment of principal and interest by the U.S. government. Like Ginnie Maes, with B of A type pass-throughs, mortgagor's payments are held in a non-interest bearing account until transferred to the trustee for distribution to certificate holders.

The rating of the issue by either of the rating services can also be viewed as a safety feature ensuring the credibility of the issuer and the quality of the underlying collateral. Standard and Poor's takes four factors under consideration before preparing a rating: 1) the nature of the collateral in the pool, 2) capabilities of the issuer/servicer, 3) the level and nature of the insurance or equity reserve, and 4) the capabilities of the mortgage insurance company.

Comparative Price Changes

	Common Stocks	Percent Change	Average Sales Prices New SFD Homes	Percent Change	Consumer Price Index	Percent Change
1950	14.60		$ 9,781		72.1	
1955	34.20	+134.2%	$12,113	+ 24.0%	80.2	+ 11.2%
1960	55.85	+ 63.3%	$14,662	+ 21.0%	88.7	+ 10.5%
1965	88.17	+ 57.8%	$21,500	+ 46.0%	94.5	+ 6.5%
1970	83.22	- 5.6%	$26,600	+ 23.7%	116.3	+ 23%
1975	85.17	+ 2.3%	$42,600	+ 60.1%	161.2	+ 38.6%
1979	98.34	+ 15.4%	$71,800	+ 68.5%	236.4	+ 46.6%
1950-1979	Percent Change	+573%		+634%		+227%

Sources: U.S. Department of Labor, Bureau of Labor Statistics, Housing and Urban Development, Federal Reserve Bulletin

The pass-through security represents only one new prudent investment tool for employee benefits plans diversifying toward real estate.

In past issues, the Bank of America has volunteered to make immediate advances from its own funds as compensation for losses, if any, due to defaults in mortgagor's payments, provided such losses are recoverable by the pool policy. This provision maintains the constancy of payments to certificate holders. Just recently, the path has been cleared by the Federal Home Loan Bank Board and the Comptroller of the Currency, whereby pool and hazard insurance may no longer be necessary in assuring regular distribution of payments to certificate holders. Special reserves of five to ten percent of the aggregate principal value of the pooled mortgage loans can be set aside by the issuer and drawn upon by the trustee in the event of delinquencies or defaults. This new feature will be utilized increasingly in future issues in lieu of pool insurance policies. With this new concept, payments to certificate holders would remain uninterrupted, as may not be the case with delays in utilizing pool insurance policies to recover losses.

Mortgage pool insurance covers any loss in the event of default in payments in an amount equal to five percent of the initial aggregate principal balance of the underlying mortgage loans. The hazard insurance policy covers every mortgage in the pool to the maximum insurable value of the improvements or the amount of the loan's remaining principal balance, whichever is less. Some issues offer additional protection to certificate holders by taking out special hazard insurance policies in an amount usually equal to one percent of the initial aggregate principal balance of the underlying mortgages, which alleviates losses from such acts of nature as flooding, earthquakes, and mudslides.

Theoretically, the B of A and similar pass-through security issues remain in existence until all the mortgages in the pool are paid off. However, the issuer retains the right to repurchase all the loans in the pool, thus ending the pool, when the outstanding aggregate principal balance falls under ten percent of the original aggregate principal balance. While industry statistics show that the average life of 30-year, fixed-rate mortgages is 12 years, and in some areas of the country less, because of the nature of the pool, this ten percent level is not expected to be reached earlier than 15 years. Repurchasing the certificates at fair market value plus accrued interest at the pass-through rate once the ten percent level is reached should be viewed as desirable to certificate holders, as the resale market for certificates of such small pools would be slim, if not nonexistent.

The pass-through security represents only one new prudent investment tool for employee benefits plans diversifying toward real estate. As the real estate market evolves, so, too, will investment opportunities. Indeed, hybrids of the B of A program are quickly gaining investor acceptance in the open market today. Importantly, the real estate market, adapting to investor needs, is shifting away from its earlier entrepreneurial connotations. □

"Dedicated to providing a quality investment management service for a limited number of select clients."

WINCHESTER
Capital Management Company
INCORPORATED
One Federal Street, Boston, Massachusetts 02110